The Hunterian Oration
FOR
1871.
DELIVERED AT THE
ROYAL COLLEGE OF SURGEONS OF ENGLAND
On the 14th of February,

BY SIR WM. FERGUSSON, BART., F.R.S.,
PRESIDENT OF THE COLLEGE, AND SERJEANT-SURGEON TO THE QUEEN.

MR. PRESIDENT AND GENTLEMEN,—We are met to commemorate the hundred and forty-second anniversary of the natal day of John Hunter.

Although Hunter's death, which occurred in 1793, was lamented, owing to its tragic character, and the prominent position he held as a surgeon and man of science, there was a somewhat tardy recognition of those great qualities for which he has been subsequently eulogised. There were varied opinions among his contemporaries and survivors; and, for seven years after, it seemed doubtful what might become of the palpable remains of his life-long labours in science and surgery. The chief of these, his museum and manuscripts, were in confusion; and there was great danger that they might be so scattered and subdivided that the grand objects of his researches might never have been comprehended. Happily, through the sound judgment of his executors, and the enthusiasm of an apprentice boy, William Clift, the precious relics were held together until purchased as a whole by the Government, and finally placed under the care of this College. In the year 1800 the collection first came under the protection of the Royal College of Surgeons. The proved abilities of young Clift were still devoted to its service; but considerable time elapsed before it acquired more than a beginning to the great reputation subsequently attached to it.

The absence of proper catalogues seems to have been much felt. Hunter had delayed this part of his work, doubtless trusting to leisure time in later years. A gentleman, who might be considered equal to Clift himself in knowledge of the contents and characters of both, undertook the duty, and for that purpose had the manuscripts removed, for convenience, to his own residence. A cartload—literally a cartload—of these was taken possession of, but never again saw the light of day. Years rolled on; trustees, council, and Mr. Clift alike failed to regain possession of the papers, or of the semblance of a catalogue. At last, in 1823, it was announced that these papers had been committed to the flames! It was not until 1813, and after much expense, towards which Parliament liberally contributed, that the Museum was open for public inspection.

Catalogues have been prepared under most proficient skill; the Council has spared neither pains nor expense to enhance its character; and at this date it is indisputably the finest of its kind in the world. The progress of increase seems never to cease; year after year large acquisitions are made by purchase and from donations; and since we last met on an occasion like the present, a collection specially illustrative of dermatology has been added, by the munificence of a member of our Council, which augments in a remarkable degree the value of the whole.

About twenty years after Hunter's death, two of his connexions and most distinguished pupils, Dr. Matthew Baillie and Sir Everard Home, made arrangements for the permanent commemoration of his birthday, and since the year 1813 a ceremony like the present has, with few intermissions, taken place. A member of the Council of this College is required by the terms of the deed of arrangement to pay tribute to Hunter's memory, and to make passing record of recently deceased members of our profession, whose deeds in life may have had association with the works in which Hunter himself had been interested.

Seventy-seven years have elapsed since the death of Hunter, and his memory is at this date cherished in a greater degree than it was sixty, or even forty, years ago. In the progress of time his works have become more and more appreciated, and with all familiar with them the impression increases in force, that he has left indications of industry and intellect such as have rarely been associated in one individual. In addition to his great Museum, portions of his writings have carried his reputation far beyond the sphere in which that collection is placed, and it is interesting to consider on which his future fame will most depend.

It was specially characteristic in Hunter so to associate the labours of head and hand that it may with many be difficult to determine in which he most excelled. A glance at his Museum fills the mind with wonder that it should have been the work of one man. The few volumes of his collected writings seem small in proportion; but before coming to a conclusion, the contents of each volume, the quality and original thought contained in that small compass, should be well considered; and if, in addition, the enormous quantity of manuscript which he left be taken into the estimate, hesitation may arise in deciding as to the field in which his labour was greatest. The proofs on behalf of his pen, now extant, are small in comparison with the mass of papers unhappily destroyed, including the famous ten folio volumes so much lamented by Mr. Clift. When that gentleman was examined on the subject in 1834, by a Committee of the House of Commons, he enumerated a list of papers and treatises, so extensive in number, and so rare and original in quality, that apparently there had been destroyed much more than enough to have founded an imperishable name and reputation in science and natural history.

It has been rare among physicians and surgeons, considering the numbers of eminence who have flourished, to leave long-standing memorials of their greatness. Their works of skill and art have perished with themselves in a generation. Great statesmen, architects, engineers, and painters have left enduring, palpable proofs of their qualities, and they are known to fame almost solely by such proofs. No writings remain to attest their scientific skill, or to diffuse their individual knowledge to mankind.

It would be too much to expect at this date palpable memorials, such as I refer to, of Hippocrates or Galen; but to come to more recent times, since the study of anatomy has been zealously pursued, how small is the number of great men in our profession whose fame can be traced otherwise than in association with written works. History is quiet regarding any preparations left by Mundinus, the founder of systematic anatomical teaching. No evidence remains of the hand-labour of Vesalius, Albinus, Cheselden, Cowper, and a host of the bygone great. Only a few proofs of William Harvey's dealings in anatomy are preserved in the College of Physicians of London. Happily, the greater part of Ruysch's celebrated first collections is still, I believe, in good condition in St. Petersburg.

The industry of Ruysch as anatomist and writer was marvellous; but our English anatomist had a shorter life by a quarter of a century; and, all things considered, there has probably been no such combination of work in one man as that centred in John Hunter. There may have been more voluminous writers in so far as printed works attest, but the untoward fate of his manuscripts must be borne in mind. In respect of work, in the development of a great museum, it may be fairly said that he stands unequalled; and in the combined qualities of writer and practical anatomist, he is alone in a field where a competitor cannot be named.

It is not, however, in mere industry that Hunter's position is to be estimated. There was an originality of thought and action in all that he did which put him far above the rank of ordinary men in his own department of science. His Museum was not a rambling collection of curiosities in natural history, anatomy, and pathology. It was specially designed to illustrate his own favourite pursuits: the study of life in all its phases; its causes, nature, and development, from the lowest stage of organisation up to the complex structure of man—from the seeds of vegetables to the eggs of animals—from vegetable sap up to human blood and its products.

An anecdote related by Sir Benjamin Brodie in the Hunterian Oration for 1837 is indicative of Hunter's originality and scope of observation. Sir Benjamin says: "When I was formerly giving lectures as professor of this College, I

found in a drawer in the Museum what appeared to be some pieces of dried sticks. Mr. Clift said that he did not know what they meant, but he was sure that they meant something, and therefore he had preserved them. When I examined them, I found that they were the result of some interesting experiments in vegetable physiology. It appeared from one of them that he had made the first and most important of the experiments made many years afterwards by Mr. Andrew Knight, proving the descent of the sap through the vessels of the bark. Yet these specimens had no ostensible place in the Museum, and they would have been swept away as rubbish but for the care of Mr. Clift."

Many illustrations of a like kind might be collected to show how Hunter was ahead of his time; and the conviction is strong that, had his manuscripts been preserved, the value and originality of his museum labours would have been greatly enhanced.

Happily for the character of Hunter and his Museum, the silent testimonies of many of his labours have been admirably deciphered by those who have had the principal care of the preparations. It was, indeed, fortunate that Clift should have devoted his life-labour on behalf of his master's works and fame. Equally fortunate was it that such a man as Owen should have appeared on the scene so opportunely. Nor should the zeal, talent, and industry of Stanley, Quekett, Paget, Morris, Taylor, and others be forgotten in association with Hunter's Museum. To all these gentlemen is chiefly due the merit of those compendious catalogues which throw so much light on Hunter's works and thoughts. It is, in addition, gratifying that the collection is at present under the curatorship of one distinguished alike as anatomist, surgeon, and naturalist, whose work already done gives anticipation of a glorious further career, that shall place his name in association with the Hunters and Cuviers of bygone years.

Few have thought seriously of the time, labour, and expense of developing museums in association with our profession. It seems doubtful if there was any collection in this country worth speaking of prior to the time of the two Hunters. All the senior part of my professional hearers must remember how, in their earlier days, there was a kind of fashion in regard to the formation of museums. Everyone who devoted himself to teaching anatomy, medicine, or midwifery, set his heart upon such work, and some may have lively and possibly peculiar feelings in regard to the labour, time, and money expended. Happily, by the modern system of aggregation of teachers into schools, such custom has fallen into abeyance. Instead of individual exertion, the effort is made by the whole school, and wealth in this way, pecuniary and scientific, has gradually been accumulated, which only the Hunters could have appreciated.

It is said that William Hunter's collection, now belonging to the University of Glasgow, was made at the cost of one hundred thousand pounds. John Hunter's is said to have cost seventy thousand. Through the apathy of a British Minister, who thought that shot and shell were, at the time, of more value to the country than anatomical and pathological specimens, the collection of William Hunter was refused a home in the locality where it had been made. At a subsequent date better feeling prevailed in regard to the younger brother's great works. The purchase-money paid by Government was small compared with the original outlay; but Parliament has again and again responded liberally to appeals for pecuniary aid to extend the buildings for the accommodation of the Museum; and the Royal College of Surgeons of England, dependent solely upon its popularity with the profession and the public, has been enabled so to cherish the original collection of Hunter, so to add to it, and so to associate it with accessories and adjuncts, particularly with a magnificent library, that it is displayed in its present magnitude at a cost of a quarter of a million sterling. This grand possession may be said to be the property of the surgical profession and of the public of England. The trustees, and the Council of this College, are its guardians appointed by law. It is freely open, under reasonable regulations, to all comers, of all quality; and an enthusiast might say, with truth, that it is the heart and soul of British surgery.

Without discussing minutely whether Hunter's future fame will depend chiefly on his Museum or on his printed works, it may be admitted that he is most extensively known by the latter. It is the lot of few, comparatively, to have it in their power to visit the Museum, but his writings extend over the earth, and his doctrines may be said to constitute a large portion of the science of the best practical surgery of the day.

There are mysteries in nature which Hunter did not pretend to explain; and it might be well if some modern philosophers held in mind that the result of life-long study should not be disturbed by the passing idea of a moment, or by the reckless ambition of upsetting or ignoring doctrines emanating from a brain wherein thought had, for more than forty years, assumed a favourite place.

Of all Hunter's printed works, the treatise on the Blood and Inflammation is generally admitted to be the most profound. To my mind, there are no parts so replete with interest as those devoted to Development and Absorption. Yet these, if not forgotten, have been wellnigh smothered in modern verbiage. Separate centres of life, new formations and growths, arrestments and changes of action, irrespective of blood and circulation, are among the fashionable doctrines of the day. "Molecular disintegration" now takes the place of Hunter's "disjunctive absorption." Crude statements about veins doing what Hunter described as being done by absorbents—doing what he positively showed by experiment that they could not; about pus circulating in the blood; about secondary deposits (as they are called) being the direct result of primary deposits,—ignoring the power of nature to make another, and yet another, deposit when she has already made one; rough experiments which have no semblance to nature's actions; modern methods of accounting for malignant disease in various distant parts of the body, as being secondary deposits; are among the recent ways of tampering with the beautiful and philosophic views of Hunter.

A great living philosopher, one who is specially great in facts, has suggested that when the microscope fails to detect the elementary particle, imagination may legitimately be permitted to bridge the gap, and mentally extend our vision. But such philosophy is, after all, far from being new. Shakespeare speculated with imaginary histology. He makes Hamlet, at a prior date, deal with it, as thus:—"Why may not imagination trace the noble dust of Alexander till he find it stopping a bunghole?" Or, again,—

> "Imperial Cæsar, dead and turned to clay,
> Might stop a hole to keep the wind away."

If imagination is to be a future legitimate course in this direction, let us imagine something more noble for the "dust" of our hero than the "base uses" to which that of Alexander, or of Cæsar, was consigned by Hamlet.

If I have thus, in good humour, and, I hope, without offence, ventured to question the superiority of certain modern doctrines over those of Hunter, yet I do not fail to bear in mind how little will occasionally arrest or turn aside the tide of events in our profession. The current is naturally slow and easily obstructed. More than half a century elapsed ere Davy's suggestion regarding anæsthesia in surgical operations was carried into effect. The progress of ovariotomy was retarded for full thirty years by a simple song of local and personal humour. Who can say what may have been the influence of the sarcastic wit of Rabelais, of Butler, and of John Bell on the doctrines of Taliacotius? Du Hamel and John Hunter were the great animal transplanters (if I may so call them) of their days. Here are the celebrated preparations, from Hunter's own hands, of cockspurs and human teeth, taken from their natural locality, flourishing in the cockscomb. Death abruptly cut short Hunter's surgical career; but may we not claim for him, with all deference and honour to Reverdin, Pollock, and others of the day, that he anticipated, by a hundred years, the scientific data on which the present system of human grafting or transplanting is conducted? Here [pointing to a picture] is a representation of portions of skin, each, originally, not bigger than a pin's-head, taken from what Butler would have called the "brawny" part of a boy's arm, flourishing on an ulcer of the leg of an old lady above sixty! What would John Bell, were he now alive, say to this?

But time warns me that I have still other duties to perform within the hour, when my allotted task must be accomplished.

The grave has recently closed over the mortal remains of

James Wardrop, Sir William Lawrence, Joseph Hodgson, Sir James Young Simpson, and James Syme. It has seldom happened that so many distinguished men have had claims for notice on occasions similar to this.

James Wardrop possessed great natural abilities, and was an original thinker and actor. His essays "On the Morbid Anatomy of the Human Eye" were much esteemed in their time, and his "Observations on Fungus Hæmatodes," published at an early period of his career, forms to this day the standard work; I may say the only one, on the subject worthy of special note. Some of his published didactic lectures were models of power and simplicity, and his last great work "On Diseases of the Heart" evinced the sagacity acquired by experience and age—a simplicity of practice, and a reliance on nature, which might be expected from a Hunterian disciple. The fact that he was the first surgeon in England who, after the example of Dupuytren, removed a tumour in the lower jaw by total vertical section of the bone, places his name on the list of high-class practical surgeons; and his modification of Brasdor's operation, his original distal operations, and the effect that all have had on this department of practice, bring his name in association with Hunter's as closely as that of any other in the history of British surgery.

Of Sir William Lawrence it seems almost a work of supererogation to speak in this theatre. His intellectual head and brow, expressive features, and manly form, can never pass from the remembrance of those who saw him in his prime. A pupil of Abernethy, and an admirer of Hunter greater than his master, if that were possible, he, of all English surgeons, excelled the most in developing the labours of Hunter in comparative anatomy. The currency which he gave in England to the works of Blumenbach; the taste, eloquence, and ability with which he inculcated the study of comparative anatomy—a subject little more than in its infancy in Lawrence's early days; his mental capacity as anatomist, scholar, and orator; his polemical energy in supporting his favourite views, whether these were scientific or medico-political, marked him in early years as one of the foremost men of the day in the walk of life which he had chosen. He rose, as we all know, to the highest honours to which a surgeon can aspire in this country; but it has often been said, and assented to, that, had he been a member of another profession, he might have risen to the highest rank which a subject in England can reach. His treatise "On Hernia," originally a Jacksonian prize essay, may be considered as the first compendious work on this most important subject which ever came from British surgery; and, although published more than sixty years ago, may, in its fifth edition, be considered the standard of reference at the present day. His treatises "On Diseases of the Eye" gave him great and well-grounded reputation in ophthalmic surgery. His "Introduction to Comparative Anatomy and Physiology," and his "Lectures on Physiology, Zoology, and the Natural History of Man," added largely to his fame in early life. His position as surgeon to the greatest of English hospitals with which our profession is in alliance, his acquirements, his oratorical powers, his repute with the profession and public at large, all made him a man of great note. It gives me much pleasure to state that, on some familiarity with the Hunterian orations that have been delivered in this theatre, the two specially devoted to the subject by Lawrence seem to me among the most eloquent which the occasion has ever called forth.

Joseph Hodgson received a considerable part of his education under Abernethy and Lawrence. He distinguished himself in early life by his treatise on the Diseases of the Arteries and Veins, containing the pathology and treatment of aneurisms and wounded arteries. The work, which in its first stage had secured the Jacksonian prize, was more elaborate than any that had appeared since the Hunterian doctrines on the subject had been recognised and approved. It was comprehensive and practical. The language and composition were simple and easily understood. It was much esteemed at the time, having been translated into German and French; and it forms a worthy companion to the first-class treatises on surgical subjects which have come from many of his contemporaries—such as Scarpa, Astley Cooper, Charles Bell, Brodie, Samuel Cooper, Travers, Colles, Guthrie, Porter, and numerous others. Mr. Hodgson commenced professional life in London, but soon after was induced to settle in Birmingham. In the extensive opportunites afforded for practice in that populous town and surrounding district, he acquired the esteem and confidence of the public and his professional brethren; and for many years no man among the surgeons of Britain was held in greater respect. After a most successful career, he withdrew from the scene of his active labours, and settled in London in dignified retirement. His mind still clung with fondness to the subjects with which it had been most engrossed, and for years his opinion was eagerly sought by his admirers in the profession and among the public. So highly was he esteemed by the Fellows of this College that he was elected to a seat at the Council board, and in due time placed by that board on the Court of Examiners. It must be in the recollection of many here how zealously, honestly, and ably he performed all the varied and often most onerous duties pertaining to such distinctions, and also how gracefully he filled the presidential chair before finally retiring from public life. It was his fortune to be a Hunterian orator. Few others more clearly and zealously appreciated the Hunterian philosophy; and it was a pleasing combination of circumstances which finally brought him out in that character, after he had been long recognised as the chief authority on the operation with which Hunter's name is indelibly associated.

The name of Sir James Young Simpson is deeply impressed on the history of medicine and surgery. His example is one among many in our profession, as well as in others, of what may be called a self-made man. Possessing even fewer advantages than most beginners in life, his individual industry made up the deficiencies. He rarely, if ever, neglected an opportunity of acquiring knowledge. He worked in schoolboy days whilst others played. In early professional life he attracted the notice of Dr. John Thompson, the able expounder of Hunter on Inflammation, and was selected by that distinguished man as a special assistant. The scientific atmosphere in which Thompson lived must have had great influence on Simpson's youthful, I may say latent, talent. The connexion, I have no doubt, went far to favour his claim for the chair of Midwifery in Edinburgh. Once fairly fixed in that position, it became the stand-point whence emanated all his subsequent multifarious and brilliant intellectual work. In his own special department I do not presume to be a judge, but I imagine that since the days of Smellie, William Hunter, and Denman, he has never been surpassed. In scholarship, in antiquarian lore, and in extent of practice he has had few equals in our profession; and rarely have men earned such distinction as he did out of their ordinary walk in life. The zeal with which he investigated any subject, professional or otherwise, was unbounded, and it has been, I venture to say, fortunate for modern anæsthesia that Simpson lived. Whilst recognising his remarkable discovery and development of the peculiar influence of chloroform, it may in after time be questioned whether he does not deserve equal if not greater credit for the persistence with which he advocated anæsthesia in woman's most trying hour. Sulphuric ether is still by many thought equal if not superior to chloroform, and other agents are in high repute in surgery and dentistry; but Simpson's practical vigour in anæsthesia has never been surpassed, and his name must always remain associated with one of the most remarkable discoveries connected with our profession. Although Simpson's path was more as a physician than a surgeon, he had remarkable proclivities for surgery. These were evinced in every imaginable way in his own special department, but chiefly in his discovery, as I may call it, of acupressure, and the remarkable zeal with which he recommended this mode of closing divided arteries. His forensic powers in advocating the advantages of this practice have never, I imagine, been sufficiently appreciated. His abuse of the ligature would have gratified Paré's most violent enemies, and his modern artillery, consisting in suppuration, absorption, blood-poisoning, pyæmia, and secondary deposits, might, if used in former times, have blown the doctrines of the great Ambrose into thin air. It was in association with this subject that his powers as a special pleader were remarkably displayed; for here he revived and made to appear in a new and original aspect, under the name of surgical fever, all those doctrines regarding symptomatic, sympathetic, or inflammatory fever, which had been in a manner originated by John Hunter, and elaborated by Thompson, Travers, and others. Yet in

regard to these matters, we must claim Simpson as a genuine disciple of Hunter. His object was to further adhesion by the first intention, and to avert constitutional irritation. He entertained the idea that needles were less of foreign material, less offensive to nature, than ligatures. This is neither the time nor opportunity to discuss these interesting matters in association with surgery or Simpson's memory, but I cannot resist the opportunity of paying my humble tribute of personal commemoration to one who, in the combined character of physiologist, archæologist, obstetric physician and surgeon, and the giver of the greatest possible good to the greatest possible number, has perhaps never had an equal.

My last tribute in this way shall be in memory of James Syme. Like most who have specially distinguished themselves in surgery, Mr. Syme began his brilliant professional career as a teacher of anatomy. His destiny, however, had been surgery, and he soon relinquished the scalpel of the anatomist for the knife of the surgeon. His success in his newly-assumed duties was remarkable. His zeal, earnestness, and ability were speedily recognised; and although at this time he was comparatively quiet, modest, and of retiring habits, he gained hosts of admirers and friends, who foresaw in him the future chief of surgery in Scotland. He had to work his way, I may say stand his ground, in a department already occupied by distinguished teachers—Allan, Turner, Liston, and Lizars; yet the numbers of his pupils speedily became nearly as large as those of the whole of his contemporaries. At this period, before taking office in the Royal Infirmary, he, almost on his single responsibility, instituted a small surgical hospital, which he managed in all its departments with prudence and indomitable energy. Cases of special interest were sent to him from all parts of Scotland, which enabled him to display that great diagnostic power, clear judgment, rare manual dexterity, skill in design, and surgical courage, for all of which he afterwards became so distinguished. It was here also that he speedily evinced those remarkable qualities which made him the ablest clinical teacher of surgery of the day. I remember well the effects of his labours on his immediate pupils. He was their prophet in surgery, and inspired them with entire confidence in his powers. The great tact which he had in making a trivial case in surgery appear almost as interesting as one of the most complicated, was remarkable. Although in reality he had a keen relish for all the great things in surgery, he could clothe the story of a carbuncle or a whitlow with the romance of a diseased elbow—a theme rendered at that time, through his individual exertions, of surpassing interest. The migration of Liston to London left Syme on the well-won throne of practical surgery in Edinburgh and Scotland; and how he held sway, and increased his renown, is well known to all who have watched our schools during the last thirty or forty years. There is scarcely a subject in surgery which he has not touched, and thereby adorned. Besides his standard works "On the Principles of Surgery," "On Excision of Diseased Joints," "On Diseases of the Rectum," "On the Pathology and Practice of Surgery," and his remarkable papers on Stricture of the Urethra and Perineal Section, he has written more voluminously in the shape of isolated papers on surgical subjects than any practical man that could readily, perhaps possibly, be named. His operations on the jaws when they were little known in Britain, his revival of excision of the elbow, his special amputation at the ankle-joint, his ingenious plastic operations on the face, his operations on the great arteries for aneurism (on Hunterian principles, and notably on the old principle), and his bold removals of the entire upper extremity, will indelibly associate his name with the grandest deeds in practical surgery with which we are acquainted. Mr. Syme was in every sense an accomplished surgeon. His preliminary education was good; he had knowledge and skill in modern languages, and inborn taste for science and natural history, which he cherished throughout life. But a passion for surgery seemed to dominate in his temperament. Happy for himself that it was so, for it may be justly said that he was king among his fellows; and happy it has been for surgery that such a man should have devoted his great abilities to the embellishment of that department of art and science in which the disciples of John Hunter are so deeply interested.

Such themes are apt to attract too much attention from one in my present position. It must be admitted, however, that they were at least the second object of the founders of this ceremony.

Before making my bow of conclusion I shall revert to the memory of the great man in whose honour we are assembled. In as far as we can make out, his life was happy as it was brilliant, and peculiarly so in that he was enabled, without hindrance, to indulge, to a greater extent than most men ever did, in a natural, useful bias of mind. His professional gains were estimated by himself chiefly in proportion as they enabled him to pursue his studies and increase his accumulations in natural history; and he gratified his desires in this way to an extent as fabulous as history records. Men have given thousands for single pictures, or objects of art; but who, excepting John Hunter, enthusiast above all other anatomists, ever paid five hundred pounds for a human skeleton? That his pursuits were more pleasurable to him than any other work in the world must be undoubted. Look at the results. He, in the course of years, and at the age of sixty-five, accumulated a treasury of facts in his museum and writings, which, from the time of his death to the present day, may be said to have been the fountain-head of modern science in our profession. The streams from thence have flowed in largely varied directions, and no man yet can span the course they may take! Truly his example may excite to emulation. Even the length we may lag behind should induce us to think more highly of the lofty pinnacle where he stands, alone among surgeons! The question between genius and industry is not worth discussion in his case. That he had industry no one can dispute; he has left evidence of it unparalleled among surgeons. I am a firm believer in his genius, but am of opinion that it was so tempered, so overspread, with the spirit of industry, that there was the just balance, so rarely combined in one man, which gives him a pre-eminence among mortals, and a rank in place with the greatest of human beings. He was born, the tenth child of his parents, in a modest country house in Scotland. He seems to have led the idle life of a wayward, petted boy, until twenty years of age, when his action changed, and the dawn of his future greatness appeared. He had neither wealth nor influential friends to further his worldly prospects, yet he rose to be the foremost surgeon and physiologist of his day. He read nature more closely than most other men, and thereby came nearer in communion with the Divine Author of all. Parts of the proof of his physical labour are treasured within these walls; portions of his mental labour are, in printed form, the property of the world at large; his mortal remains rest beside those of many of England's greatest sons within the hallowed shrine of Westminster Abbey.

Such is, in brief, the story of John Hunter!

REMARKS ON SCIENTIFIC THERAPEUTICS.

Being a Portion of a Lecture delivered at Guy's Hospital.

By SAMUEL WILKS, M.D., F.R.S.,
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I WISH at an early part of the course to make a few general remarks on our method of treating disease, as it will save me much trouble in the future. This method, in a word, I shall have to teach you is empirical. I shall inform you to the best of my knowledge and experience what remedies have been found most effective in arresting morbid processes, or in conducting the patient safely through them; but I shall not attempt any theory or explanation of their action. We may discuss such questions (as we now constantly do) as a little mental exercise at the bedside of the patient. Neither shall I attempt to lay down any fixed principles of treatment, except such as experience has shown us can be safely adopted. For, on the belief that all our best treatment is empirical, it would be only a waste of time to make any effort to theorise. I should have preferred to offer you some principles based on true scientific grounds, and on which you could act in particular cases,—to have explained to you how we are possessed of various drugs having distinctive properties, and under what circumstances these may be

employed in disease. I believe, however, that at the present day this cannot be done, nor is it wise to speak of principles when framed from conclusions whose premises are altogether false. To say that I have no principles is a humiliating confession, and in declaring it I am conscious of running counter to the opinion of the greater number in our profession; and in acting upon it probably should be opposed to an overwhelming majority. I mean by this, that probably the larger proportion of practitioners associate some theory with the administration of their medicines. For my own part I believe that we know next to nothing of the action of medicines and other therapeutic agents; that experience alone has informed us of their value in particular diseases; that we have no especial indications whereby we can be certain of their action; or, in other words, that the individual symptoms afford us but little aid in the proper use of a drug, but that we are rather guided by the totality of the symptoms, or by what is called "the disease." We must indeed treat the disease, and not the symptoms. I know, in stating this, that I am carrying you back to a former therapeutic age, and am disturbing the very foundation of the therapeutic art. There was a time when I scarcely dared to confess these opinions to myself; and this is the first occasion on which I have been bold enough to assert them before my class. I do so now, and wish to enforce them; for I believe an attempt to theorise with superficial knowledge has been the great bane of therapeutics for the last twenty or thirty years.

I may better explain my position by a few illustrations, and then leave to you the whole range of medicine to confirm it. First of all, remember that most of our valuable remedies have come to us from unknown sources, and were never suggested by any theoretic considerations whatever. Turn over the pages of the Pharmacopœia, and see how few and valueless are those drugs which theory has proposed compared with others brought us from barbarous times and nations, such as digitalis, bark, arsenic, or ipecacuanha. Then, again, when we have found a valuable drug, and have some knowledge of its action in the healthy body, this assists us very little in the treatment of disease: for example, those which have a peculiar physiological action on the nervous system, such as opium, conium, or chloroform, are found to be of far less value in nervous diseases than quinine, zinc, or iron; whilst, on the other hand, opium and nux vomica are of more avail in any other than nervous diseases. I do not want you, therefore, to continue to do what has been done ten thousand times before—to give opium, chloroform, or conium in such diseases as tetanus, mania, or chorea, simply because you think they are suggested by the symptoms. It is because there is an apparent natural suggestion for their use, and yet they are found valueless on trial, and because also the more beneficial remedies, such as zinc or iron in chorea, have never had their action satisfactorily explained, that I employ this language; the only indication for the use of these drugs being the existence of a particular disease, and not the presence of any particular symptom. Moreover, could we treat symptoms, or influence them by our remedies, it by no means follows that it should be our aim to do so. Because a person is delirious or maniacal, you are not necessarily to neutralise his condition by stupefying him with opium or chloroform; indeed, the greatest harm frequently results from such a superficial line of practice.

Now, this is not what you would have liked me to teach you; you would have preferred that I should have laid down some plain rules and scientific principles for your guidance. I know this, for thus I felt when a student; and how pleased I was to have a guide in the person of a surgeon who could say that, with that state of pulse, you must give calomel, and, with that, you may combine opium with it; or, looking upon an inflamed surface, could inform you on principle when leeches were desirable, when a hot poultice, and when a cold one, should be applied. In ophthalmias of various kinds, you could be informed of the symptoms which indicated the use of either leeches, blisters, opium, or calomel. Nothing could seem more scientific or more self-satisfying to the student. But, alas! very soon my whole medical nature received a severe shock when I beheld this gentleman's successor ignore the whole practice, or adopt an opposite method with equally good results. The error lay with this surgeon in believing that he understood the value of symptoms—in assuming that the symptoms should be treated, and in thinking he was acquainted with drugs which could influence them. These notions were all based on a theory which no facts warranted his forming. The method, however, is still pursued by many at the present day. What many of us have heard orally and from books is a doctrine which you would all accept without hesitation were I to propound it to you as a most reasonable and just one; but, unfortunately, it is the very opposite to that which I have already declared, and am bound to teach you as the more correct one. You have heard, for instance, such a speech as this: "Do not go into the wards, and, examining the bed-card, observe the word 'pneumonia' written on it, and then take a note of the treatment to guide you in future cases, for this would be but treating a name; rather study the symptoms, so that each case may be treated on its own merits." I had myself at one time a half belief that this was true, but I now know that, even if it be true, the feat cannot be accomplished; indeed, my strong conviction is, that this vain attempt to treat a case on its merits is the grand cause of all the bad therapeutics of the present day; it has been the cause of the too prevalent discarding of drugs, and of the great modern heresy—the administration of stimulants in nearly all diseases. It seems to be taking you a retrograde course to instruct you to regard the diseases rather than the symptoms, and lead you back to pure empiricism. But when you remember that we have at present but little knowledge of the meaning of particular symptoms, that we are ignorant of the action of medicines, and that we have not satisfactorily proved to ourselves that we ought to treat symptoms, we had better have done with theory until we get a larger insight into morbid phenomena. Pope's oft-quoted lines certainly apply here:

> A little learning is a dangerous thing;
> Drink deep, or taste not the Pierian spring.

I will now try to show you the hazard you incur by attempting to treat symptoms rather than by regarding the disease as a whole, and treating it in the manner which experience has dictated to be the best. I think I can show you, also, the incorrectness of the opinion that a disease is nothing more than the totality of the symptoms. This, by-the-by, is the homœopathic theory. I may remind you of my every-day remark, that there are few pathognomonic signs of disease, but that diagnosis is founded on probabilities. Therefore that man forms the most correct opinion who has the best acquaintance with these probabilities; he, indeed, who has his mind most replete with pathological knowledge, who is familiar with all the diseases to which mankind is liable as observed in the sick-room or the deadhouse. Thus the acutest man often fails in diagnosis because he is ignorant of the existence of certain diseases, or at least of their frequency. This he himself will sometimes admit, declaring at the same time that the want of knowledge is of no importance, as his business is with symptoms only. Now, let us see the result of this doctrine; and you will agree with me that it is often a very melancholy one. Suppose two cases of paraplegia come before you presenting much the same symptoms. One of these you cure by tonic medicines and galvanism; for the patient has (what has been called) an exhausted state of the cord, induced by excesses, or perhaps by a railway shock, whereby the tone of the nerve-centre has been lowered. You adopt the same treatment in the other case, with complete failure, but afterwards cure it by iodide of potassium. Why? Because, not content with observing the symptoms, you have discovered the cause of the disease to be syphilis, and then you cure him. The medicine would have been the same, and the result equally satisfactory, had the symptoms been different. Again, you cure an enlarged aguish spleen by quinine; but you administer it in vain in the hypertrophy of leucocythæmia. I have records of more than twenty cases of this affection which show the utter inutility of the drug; but it will still be given long after you and I have done with physic, for spleen and quinine stick as closely to one another as do liver and mercury. Now, I will tell you of a case where a disregard of the cause of the disease is fraught with more serious consequences. A young girl is seized with pain in the right iliac region, accompanied by swelling and some febrile disturbance. Post-mortem experience, and nothing else, informs you that this inflammation of the bowel is very probably due to some ulceration of the appendix cæci; and the same experience will also inform

you that the lymph which is thrown out around it may, by gluing the opening to a neighbouring part of intestine, prevent further egress of fæcal matter, and limit the inflammation to a corner of the abdomen. Absolute rest, therefore, is necessary, both for the body generally and the bowel in particular. Nature attempts this by temporarily paralysing the movements of the intestine, and taking away all desire for food. Now let us see the course pursued by one who does not care to recognise the disease (after homœopathic fashion), but declares that his business is with symptoms alone. He observes that the bowels are confined, that there is sickness, and that there is abdominal pain. He thereupon turns to in order to relieve these symptoms: so he first gives a purge to excite the bowels to action; and secondly, to aid in the operation of the drug, he orders a stimulating injection; thirdly, to check the sickness, he fills the patient out with gaseous effervescing mixtures; and fourthly, he advises the nurse to rub the abdomen with a liniment, to relieve the pain and flatulence. When he has adopted the four very best means which could be devised to undo what nature was attempting to perform, and set up a fatal peritonitis, he receives with the most perfect satisfaction the thanks of the friends for not having left a stone unturned to subdue the complaint. I wish I were relating to you an imaginary case; but, unfortunately, I have the reality in my mind's eye. Such a catastrophe as this arises from treating the symptoms rather than the disease. I will give you another example: I see a patient with fever, and because the bowels have not been relieved for four days a purgative is suggested to be given. I decline to order one, as the case is one of typhoid, and I prescribe for the complaint rather than the symptoms. On that very day an excessive diarrhœa takes place. I might say that all the improved treatment of fever of late years has arisen from a due consideration of the nature of the malady, whereby it is guided in its course; and this contrasts favourably with what I have seen where a "fussy" practitioner has been dealing only with the phenomena—as, for instance, applying cold to the head against the delirium; leeches to the belly to relieve tenderness; chalk mixture to arrest diarrhœa; besides some "stuff" for the cough. As regards the propriety of administering astringents in typhoid fever, we have very contrary opinions expressed by eminent men, according to their theoretical views of the nature of the disease. If we had had the result of unbiased observation, we should before this have had indisputable facts to guide us. In what cases cold should be put to the head we know not; we see it adopted where there is pain, heat, or delirium, and thus in the most opposite conditions. In speaking of fever, I might allude to the cold-water treatment, which has been so much advocated of late in Germany. Holding the opinions I do, I should not object to use it; but to those who treat fever on principle, and who consider it of the first necessity to prevent a patient with febrile symptoms to be chilled, such a suggestion as placing him in cold water two or three times a day would be almost a homicidal procedure. I am constantly seeing hæmoptysis treated with ice-cold water to the chest, and "common sense" is said to dictate its use; but, according to Dr. Chapman's theories, heat should be the proper remedy. Now, I consider it a disgrace to our profession that we are not all agreed as to whether such treatment is beneficial or not. Surely we should possess our knowledge first, and theorise afterwards.

The treatment of symptoms in a thoughtless and ignorant manner is not, however, fraught with so much mischief as when it is put in practice by educated men, and with "malice prepense." The worst sinners in this respect have been, in my experience, young men of considerable scientific attainment, and often foreigners; they could only make use of their theoretic knowledge, and had not yet discovered by a larger practical experience that it was not sufficiently sound to be put into active operation. Thus, the other day I met a young practitioner in the case of a patient who had acute renal dropsy, and he detailed to me the symptoms in a most elaborate manner, and went through a description of the urinary casts like a book. I was delighted, and expressed a hope that his patient would soon get well under the usual treatment—such as placing him in bed, feeding him on slops, giving him some salines, with perhaps some antimony, and an occasional purge. The doctor informed me that he had done none of these things; for, since his patient complained much of weakness, he had not wished to put him in bed; nor, indeed, for the same reason, had he ventured to give such medicines as I had named; but what he had done was to order him bismuth for the sickness, and some brandy to keep him up. As for the bowels, they had not been opened for some days; but then purging would weaken him. In fact, the most opposite treatment had been adopted to that which experience has shown us to be eminently beneficial. A gentleman came to me one day complaining of diarrhœa, of which he had been the subject for some weeks. Finding it was of a dysenteric character, I prescribed some ipecacuanha, because I knew it did good in the form of disease which this patient had, although I had not the smallest scientific conception of how it acted. In about a fortnight he was completely cured. He then showed me a prescription written by a medical man of considerable intelligence, and who had ordered him a mixture and pills. Some of the ingredients composing these were compound, but by counting them all I found he was swallowing thirty-four different drugs at one dose. The doctor had given a reason to the patient for what he had done, but the gentleman could not, unfortunately, remember the several actions of the medicines. Some medical men designedly practise this method with their patients, and in good faith too; they can fill up the whole "six inches by four" after this manner: "Yes, Mr. Jenkins, your pulse is weak, and I shall prescribe a tonic, at the same time putting a little something in it to clean your tongue; for the acid rising I shall insert a little alkali, and, as your water is thick, a little something to act on the kidney, and then a little dandelion for the liver. You must keep yourself up with a few glasses of dry sherry (none other than "dry" is ever seen or heard of), and a little rum-and-milk in the morning; and, mind, a glass of beer is poison to you." If the patient were a lady, he would order something for the leucorrhœa—but she consults her physician-accoucheur specially for that. It is to be observed that we have long discontinued the use of the proper dose of medicines, and prescribe for our degenerate brothers and sisters only a "little" of them.

(To be concluded.)

NOTES OF A CASE OF

SUDDEN DEATH AFTER TAKING LARGE QUANTITIES OF CHLORAL HYDRATE.

BY HUGH NORRIS, L.R.C.P. ED.

BELIEVING that the following case possesses sufficient intrinsic interest for the medical public, I do not offer any apology for communicating it through the columns of THE LANCET. I feel the less hesitation in doing so as I am not aware that a death occurring immediately after taking an inordinate quantity of chloral hydrate has yet been recorded.

J. M——, female, aged forty-six, married, in comfortable circumstances, and whose constitution presented unmistakable evidence that she was approaching the critical period of life, had for the past seven years been occasionally addicted to excessive indulgence in stimulating liquors. In 1863 she received several mental shocks, and about the same time she also severely taxed her nervous system by too assiduously nursing a sick mother. It was subsequent to this that she first indulged to any extent in the above-named vice.

I first saw her in November, 1869, on the occasion of her suffering a severe attack of hysteria, complicated with spinal irritation; but I did not know till some months afterwards that she was the victim of dipsomania. When opposed in her desire for stimulants she became extremely violent, and, being a powerful woman, no inmate of the house escaped her assaults, or came off scathless in her struggles to gratify her desires. No treatment, moral or medical, appeared of any avail. The various diffusible stimulants and antispasmodics were in vain tried for her hysterical symptoms, and no sedative produced effect but the chloral hydrate. Of this a nightly dose soothed her more or less, and for months previous to her decease I was obliged to administer this

drug almost every evening in order to procure her any sleep whatever. I cannot say exactly how much of the drug she took, but I can state that between October 13th, 1870, and the day of her decease, she had forty-five single chloral draughts *from me*, none, however, exceeding forty grains, and some only from twenty to thirty grains. If (as on several occasions I attempted to do) I prescribed another sedative, as bromide of potassium, or henbane, with a view to break her of the habit of taking chloral, she was down on me at once. In fact, nothing calmed her restlessness or soothed her neuralgia but chloral or stimulants; and one or the other she was resolved to have. *I* preferred the former, as a very small indulgence in fermented liquors was sufficient to "set her going"; and, when she once commenced, her house was like Pandemonium. The chloral did not appear in any way to injure her health, and it certainly added to her comfort; and by its administration I hoped to control her passion for stimulating drinks.

After the 16th of December I had altogether ceased my supply of the chloral draughts until the 3rd of January, when I was hurriedly called to see her late at night, as she had taken a large quantity of a concentrated preparation of sarsaparilla, and was supposed to be dying. I found her in a fit of hysteria, and learned that she had swallowed (I presume on the chance of its containing some stimulant) fully ten ounces of Townsend's extract of sarsaparilla. I saw she was not likely to die; and at her own request she took a draught containing, as I afterwards learnt, 36 gr. of chloral, which she had obtained from a neighbouring chemist. I gave her a dose of this drug each night but one that she continued to live, usually ½ dr. a day, except that on the 8th she had 20 gr. in the morning and 40 gr. at night. On the 9th, 10 gr. in the morning and 30 gr. at night. On the 10th, 10 gr. in the day and 40 gr. at night; and on the 11th, 40 gr. at night.

On the 12th, when I returned from my morning round, I found to my astonishment that she had died almost suddenly at noon the same day. On making minute inquiry as to the circumstances attending her death, I was appalled to learn that she had been taking from the druggist above mentioned an extra draught (containing at first 30 gr., and latterly 36 gr. of chloral) each night for a month past, *in addition to those I had given her*; also that during the night of the 10th she had taken no less than *three* draughts, each containing 36 gr., in *addition* to mine of 40 gr., and 10 gr. in the morning; and that during the night of the 11th she had taken *two* such draughts, in *addition* to mine of 40 gr.

I will here endeavour to state more lucidly the amount she had taken since the 3rd of January, and then quote her husband's evidence as to her condition during the last two days of her life. On the 3rd of January, after 10 oz. of Townsend's sarsaparilla, she had 36 gr. of chloral; on the 4th, 36 gr.*; 5th, 30 gr.; 5th, 36 gr.*; 6th, 30 gr.; 6th, 36 gr.*; 7th, 30 gr.; 7th, 36 grs.*; 8th, 20 gr.; 8th, 40 gr.; 8th, 36 gr.*; 9th, 10 gr.; 9th, 30 grs.; 9th, 36 gr.*; 10th, 10 gr.; 10th, 40 grs.; 10th, 108 gr.*; 11th, 40 gr.; 11th, 72 gr.* Thus making a total of 712 gr. within 9 days, the last 260 gr. of which had been taken within 35 hours.

After the 3rd of January I saw her almost daily; and although she suffered much from sickness (a prominent symptom for some years past) I found her pretty nearly in her usual condition, save that on the 9th she complained much of neuralgia in her hands and wrists.†

I called at her house on the 11th, the evening preceding her decease, but I did not see her, as she was dressing to go out to tea with a friend; and I was told she had been better the whole day. She had from me a 40 gr. chloral draught on her return that evening; and the next thing I heard of her was that, as above stated, she had died at 12 o'clock the following day.

I will now relate the occurrences of the previous two days, as collected from her husband's statement at the inquest:—

"On the 9th she neither ate nor drank, and, as she complained of pains in her stomach, she took a draught (containing 10 gr. of chloral). On the 10th she was very much excited, and tore one of the blankets in pieces by kicking. She declined to take any medicine during that day. On going to bed, she said 'I *must* have something to put me to sleep.' She had one of the (40 gr.) draughts. About midnight she awoke and insisted on having another draught. On being refused, she became very excited, and lay on the ground writhing. During the night, however, by dint of the most earnest entreaties, she managed to obtain three other draughts, each containing 36 grs. of chloral. After the second of these she became very sick, and obtained the third draught, on the pretext that, as she had thrown up the second, it could not have benefited her. (She had on a late occasion, when taking two a night, exclaimed, 'Oh, if you only knew what good they do me, you would give me bottlesful of them.') On this night she slept calmly for an hour or two after each draught, but at daylight she was observed to talk in her sleep, a symptom never before noticed. This soon passed off, and she slept quietly. When she awoke she said she was better, and she *appeared better than she had been for a long time*; she had beef-tea and toast for breakfast, and ate more than she had done for several days." (Her husband was absent on business nearly all day on the 11th.) On his return he found that she had gone to have tea with a friend, having previously drunk half a glass of beer. Between 10 and 11 P.M. she had one of the forty-grain draughts; and between 1 A.M. and 2 A.M. a second, containing thirty-six grains. About 3 A.M. she complained much of feeling cold; but went to sleep, and awoke about 5 A.M., when she talked cheerfully. After a time she exclaimed, "I feel that pain at my stomach again." She appeared in great agony, but got up, went downstairs, took some pepper and hot water, which gave immediate relief. She returned to bed, got warm, and fell asleep. About daylight she awoke, and asked for another draught, which, after some opposition, was given her. She soon went to sleep, but awoke between 10 A.M. and 11 A.M., went below stairs without dressing, and took her breakfast, consisting of a cup of tea and two slices of bread-and-butter. She then returned to bed, and gave her husband instructions to execute some commission for her as he was going into the town. On his return, after about an hour's absence, he found her sick upstairs, and begging for brandy to stop her vomiting. As aforetime stimulants had failed to relieve sickness, he refused. He left her (in bed) for about five minutes, and on his return she was lying dead on the floor, with a vessel by her side, in which she had evidently been vomiting.

In my absence, my assistant, Mr. Edwards, saw her immediately, and found her warm but quite dead, the pupils being dilated. Four hours afterwards I saw her myself. The body was still warm, as were the sides of the face and neck, notwithstanding the coldness of the weather. All the muscles were quite flaccid, and the joints perfectly limp. The pupils were fully dilated.

At an autopsy made a hundred hours after death, there was not the slightest odour of decomposition, except in the air displaced from the lungs on moving the body. The following appearances were observed:—There were scarcely any puncta sanguinea in the white portion of the brain, which was very fresh and firm, and little if any fluid in the ventricles. The liver was much enlarged, slightly congested, and somewhat leathery. The kidneys were large, but not apparently diseased. The heart-tissue was somewhat pallid; the ventricles were empty; the auricles partially distended by dark, semi-coagulated blood. The stomach, which was not opened, contained two or three ounces of fluid matter. The body was well nourished; and all the remaining organs appeared quite healthy, but very firm, and not decomposed in the slightest degree. There was no perceptible odour of chloroform.

A hundred and thirty hours after death the stomach and contents, together with portions of the lung, liver, heart, kidney, and spleen, were submitted to Mr. Stoddart, of Bristol, for analysis; and I herewith append his report.

"The first thing that struck me was the very extraordinary way in which the several portions were preserved. Even now, although more than a week has elapsed since death, yet not the slightest sign of decomposition has taken place, nor any unpleasant odour. This doubtless is the effect of chloroform in the tissues. Part of the gruel-like contents of the stomach was treated with caustic soda, and distilled at 160° Fahr., and the vapour passed through a red hot glass tube. Chlorine and hydrochloric acid were produced, which reddened litmus paper. Iodide of potas-

* The asterisks mark the draughts supplied by the druggist, *of which I had no knowledge until after the patient's decease.*

† On this day the patient had suffered a considerable loss of blood from the menstrual discharge—a fact I only learnt subsequently to her death.

sium and starch were coloured blue, and then decolorised. Solution of nitrate of silver threw down the chloride.

"Another portion was placed in a small alembic, with a mixture of potash and soda, and distilled at 160° Fahr. by means of a water-bath, and the head of the exit tube immersed in pure distilled water contained in a small Clark's receiver. In a few minutes small drops of chloroform were slowly deposited at the bottom of the water. These were pure chloroform. The smell of chloroform was perceptible in the alembic the day after. I tested for all the poisons that were probable, but without any success.

"There seems, therefore, no doubt that an excess of chloral must have been taken, and the resultant chloroform was so disseminated through the tissues that they were completely preserved. I should mention that the contents of the stomach had no perceptible smell of chloroform till after the addition of an alkali."

In a subsequent letter, Mr. Stoddart adds:—"I found the most (chloroform) in the liver and contents of the stomach, but could not separate any from the other parts; nor could I from the heart, which seemed to have lost any blood contained in it."

I regret that I did not send any blood or brain for examination.

On reviewing this case, I think it deeply interesting in several particulars; and, without enlarging on my own views, for the present at least, I give it to the profession "pure and simple," contenting myself with mentioning the points which more especially attracted my attention.

1st. The large amount of chloral which this patient had taken in the aggregate, with apparent benefit.

2nd. The excessive doses that were administered towards the end of life, without inducing any amount of prolonged sleep.

3rd. The mode of death, which bears abundant testimony to the acumen of that profound reasoner, Dr. B. W. Richardson, who has stated that, in such cases, dangerous decomposition of the blood may occur before coma is produced, and that the repetition of considerable doses of chloral at short intervals would be followed by the formation of formiate of soda in the blood, by which its coagulating power would be much diminished; and that in such cases the symptoms would be similar to those induced by loss of blood.*

4th. The post-mortem appearances, especially the firmness of even the more friable tissues, and the marvellous state of preservation in which the various organs were found so long after death.

I fear I have trespassed far beyond the usual limits allotted to one paper in the pages of THE LANCET; but as I feel the case to be an important one, and that it is mainly by placing such on record minutely and truthfully that we country doctors can materially advance the grand cause of medicine, I hope I may be pardoned for having entered into what some persons may imagine tedious detail, while relating a plain statement of facts.

South Petherton, Somerset, January, 1871.

OBSERVATIONS ON

PALPITATION OF THE HEART AND ITS TREATMENT.

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THE frequency of the disease, and the disproportion often existing between the sensation complained of and the physical signs of disordered action of the heart, have led to the following remarks, in which the term palpitation refers only to the patient's sensation, and is thus used with its popular, though incorrect, signification.

Palpitation is one of those symptoms of a deviation from health, regarded by the subject of it with anxiety, or even with alarm, but of the nature and seat of the cause of which we only possess a slight knowledge, in so far as this consists in a structural alteration of some part of the nervous system.

A further difficulty arises from the fact that palpitation, disorderly or perverted action of the heart, and structural changes of the organ, are not always quite clearly distinguished from one another, and that a definite relationship between structural change or disorderly movement on the one hand, and palpitation on the other, is *necessarily* supposed to exist, whilst there is often no proportion between the inconvenience and pain which the patient suffers, and the signs of perverted action which can be detected by physical examination. The patient has the unnatural and uneasy cognisance of the action of his heart, and from this he seeks release, and is not unfrequently grateful for the cure of a disease of which he only knew the existence; in other words, a "beating of the heart" may be complained of when no deviation from its natural action can be detected; or there may be grave structural disease, and the most disorderly action, and yet the patient may make little or no complaint.

It is quite true that in many cases the heart *throbs* in a manner evident to the observer as well as to the patient; but in a considerable number the patient only can assert such to be the case. Palpitation is so often a mere symptom which, like pain, though quite real, varies in intensity with the individual, that it may be practically regarded as the *subjective appreciation of the heart's action*. Just as a patient who suffers pain after food—"knows that he has a stomach"—is the subject of dyspepsia, so a patient who feels the beating of his heart—"knows that he has a heart"—suffers from palpitation.

In health the heart beats with a frequency varying within narrow limits with each individual, the contractions are performed with regularity, and in definite order, best expressed by the term rhythmical. Any deviation from this state is a *derangement* of the heart's action, and affects either the frequency, order, duration, or intensity of its movements, and the knowledge of such alteration on the part of the subject of it, or even of the normal action, constitutes *palpitation*. Changes in point of frequency and of intensity, whether real or apparent, are more usually associated with sensation than those of order or duration, so that in a case of palpitation, if any physical signs exist, there will probably be increased frequency and force of the heart's contractions.

The pathology of palpitation, as of perverted movement, is at present little known. There is no doubt, however, that it is to be studied in the altered structure of the nervous ganglia and plexuses connected with the heart, the centres of the vagi and sympathetic nerves, and the base of the brain and the spinal cord.

The exciting causes of palpitation are the various attitudes of mental and bodily excitement; overwork of the heart, as in severe physical labour; mechanical displacement of the organ; certain conditions of the blood, whether naturally acquired or due to the introduction of substances from without; inflammation of the heart; reflex causes, as impressions on other organs having a nervous connexion with the heart; and also certain conditions which, like those giving rise to attacks of neuralgic tic, are for the most part at present unknown.

A scientific classification of cases of palpitation is not at present possible from our slender knowledge of its pathology, and from the want of proportion between the disease and its physical signs. The following arrangement is simply one of convenience, as it throws together cases more or less resembling one another in their clinical history and progress.

(*a*) Cases occurring in persons free from structural disease of the heart, and of any organ having a nervous connexion with it. Two classes of these patients are met with—the young in whom degenerative changes have not commenced, and those in middle or advanced life in whom they have made considerable progress.

1. Palpitation occurs in young persons of both sexes, but especially in women, in whom it is often associated with pleurodynia. A mild form of irritative dyspepsia, and paleness not amounting to anæmia, are sometimes present. There is a history of impaired health, often dating from the time of the commencement of the catamenia, or of some moral shock in the nature of an affliction or disappointment, and a "beating at the heart" is complained of on the least exertion or excitement. The touch detects increased force of the heart's impulse; to the ear there is

* Vide Medical Journal, April, 1870.

augmented intensity or abruptness of the sounds, and their frequency often exceeds that of health. Usually there is no irregularity, but now and then there is an intermission, or one or other sound is reduplicated. In these cases there would appear to be exalted susceptibility of the heart to emotional impressions, or to trifling demands of extra work, such as is required in going up stairs, together with impaired nutrition of its nerves.

2. Palpitation occurring in middle or advanced life, apart from other diseases, is probably one expression of that degeneration affecting the nervous system which is at this period of life making progressive inroads on the integrity of every structure of the body. The clinical history of such cases accords with this view. The palpitation is often of long standing, and has come on gradually, appearing after some serious illness, recovery from which has been slow, or is ascribed to some heavy affliction which has impaired the health. It is more common in women than in men, and sometimes dates from the cessation of the catamenia. The least exertion or excitement brings it on; it often disturbs sleep, is essentially chronic, and is apt to recur after apparent cure. Physical examination reveals a weak diffused impulse, irregular in force and frequency, and often with intermissions; or it may be that the action is regular, but somewhat abrupt. Usually, however, the regular, abrupt impulse of earlier life is absent. These patients are often the subjects of dyspepsia, due probably to a degeneration of some of the glandular structures of the stomach, but the palpitation will persist long after the digestion has been fairly restored by the adaptation of diet and exercise to the lessened power of the stomach.

(*b*) Cases of *distinctly* reflex origin. These are few in number, and are chiefly the results of the ingestion of food improper in quantity or quality, removal of which gives speedy relief. Probably, as our knowledge increases, this class will be largely augmented.

(*c*) Palpitation, associated with structural disease of the heart or its valves, occurs at all ages. It is not a prominent symptom of these diseases (except of fatty degeneration), in the ordinary use of the term, which includes changes of the valves, causing murmurs, obvious hypertrophy, or dilatation sufficient to lead to the grave consequences of overfilling of the venous system, and appears to be rather the effect of impaired nutrition of the heart and its nerves than of the mechanical faults of the organ. Its characters are those of the palpitation of middle life previously considered, except that it is, perhaps, less closely connected with excitement or exertion, and is often not so amenable to treatment. An abrupt throbbing impulse is more frequently absent than present.

(*d*) Palpitation is sometimes due to mechanical displacements of the heart, as by pleuritic fluid, pericardial effusion, and tumours of the chest and abdomen. The patient feels the beating of his heart; but physical evidence of deranged action is very frequently absent.

(*e*) Palpitation occurs as a prominent symptom in certain conditions of the blood, as in simple anæmia, leucocythæmia, in gout, and especially in exophthalmic goitre. It is also occasioned by the presence in the blood of substances introduced from without, as in the case of tobacco-smoking and the use of strong tea.

(*f*) The cases comprised in this group are characterised by the occurrence of palpitation in definite attacks of sudden access, and by the proportion which is preserved between the perversion of the heart's action and the patient's sensations; and also by the evidence of the disturbed innervation of organs connected with the heart. They form the transition, as it were, from palpitation to angina pectoris, and present some analogy to tic, both of the neuralgic and painless kinds. The attack commences often without obvious cause; the heart's contractions are greatly increased in frequency, intensity, and abruptness; they may be regular and violent, or exhibit the extreme of disorder. The pain may vary from slight soreness and uneasiness at the præcordia to extreme agony, associated with the impression of impending death; and a sick and faint feeling with one may, with another, become repeated vomiting and actual syncope. Griping pains in the abdomen and diarrhœa are sometimes present. Such attacks are met with in gout, exophthalmic goitre, rheumatic inflammation of the heart and its membranes, in cyanosis, and sometimes when there is no discoverable disease. That they are neuroses of the heart is rendered probable by their analogy with tic just referred to, and with those forms of neuralgia of sudden access; and this is especially the case when no changes in the heart can be detected. The very frequent, abrupt, regular action of the heart seen in an animal, as the dog, after section of the pneumogastric nerves, recalls such cases to the mind, and prompts the question whether they may not be due to temporary and partial suspension of the functions of these nerves.

(To be concluded.)

VACCINATION WITH LYMPH DILUTED WITH GLYCERINE.

BY STEPHEN MACKENZIE, M.R.C.S.,
RESIDENT MEDICAL OFFICER TO THE LONDON HOSPITAL.

AT the present time, when the subject of vaccination is occupying so largely the attention of the profession and the public, and when, owing to the sudden demand, there is difficulty in obtaining a sufficient supply of lymph, the following short communication may prove of interest.

Having read the report of Dr. Burdon Sanderson on Contagion, having also read of the employment in France of lymph diluted with glycerine, and, especially, foreseeing that, owing to the severe epidemic of small-pox now raging, we might be called upon suddenly to vaccinate all our patients, and find great difficulty in procuring a sufficient quantity of lymph, I advised Mr. Herman, the resident accoucheur, to apply to Dr. Seaton for information on the subject. Dr. Seaton, however, was unable to afford him any.

On February 3rd, a little girl, who had been admitted nine days previously with an hydatid tumour of the liver, presented symptoms of small-pox, although there was none in the hospital. She was at once removed, and it was deemed advisable to vaccinate all the patients in the sub-ward in which she had been. As Mr. Herman had very little lymph, not sufficient to vaccinate all the patients, I suggested his diluting what he had with glycerine. This he did by adding, on a piece of glass, forty drops of Price's pure glycerine to the contents of two capillary tubes of vaccine, and stirring them up well with the point of a lancet to ensure their being thoroughly mixed. There were eleven patients vaccinated. In each case the operation was performed in two places on the same arm, by a series of superficial scratches with a lancet. On Feb. 10th (the eighth day) the results were as follow:—

1. Age, seventeen years. Advanced phthisis. Vaccinated in infancy, and having one good scar on her arm. Two good vesicles, no inflammation.

2. Age, seventeen years. Advanced phthisis; greatly emaciated. Vaccinated in infancy; one not very good scar. One imperfect vesicle.

3. Age, eighteen years. Extensive heart-disease after rheumatic fever. Vaccinated in infancy; three good scars. Two good vesicles, accompanied by some little inflammation.

4. Age, eighteen years. Acute rheumatism. Stated to have been vaccinated three times; but there were no scars on the arm. Two very imperfect vesicles, which had shrivelled up.

5. Age, twenty years. Heart-disease; very anæmic. Vaccinated in infancy; one scar. Two not very good vesicles.

6. Age, twenty-two years. Acute rheumatism, with endocarditis. Vaccinated in infancy; three good scars. Two very good vesicles, no inflammation.

7. Age, twenty-seven years. Subacute rheumatism. Vaccinated in infancy; two small scars. Two good vesicles, no inflammation.

8. Age, forty-four years. Heart-disease and sciatica. Vaccinated in infancy; three good scars. Two good vesicles, some little inflammation.

9. Age, fifty-seven years. Phthisis; very ill. Stated to have had small-pox when young; no scars of small-pox or vaccination. Two good vesicles, no inflammation.

10. Age, seventy-one years. Gastric disease, probably

carcinoma. Stated to have been "inoculated" in infancy, and to have had small-pox when four years of age; no scars on arms. Two good vesicles, no inflammation.

11. Age, thirty-nine years. A complication of heart- and kidney-disease. Unknown whether vaccinated, or if there were any scars. This patient died on the fifth day after vaccination, but the arm was "beginning to take."

These cases are not very numerous, but as far as they go they show, in my opinion, that lymph diluted to the extent we used it is as potent as undiluted lymph. They are interesting also as showing how persons, even when suffering from acute and chronic diseases, who have only been vaccinated in infancy, though there be good scars, are susceptible of the influence of the vaccine virus. There were only two cases in which the operation was attended by any inflammation, and this was not nearly so severe as is often seen in persons who are revaccinated. Both these cases were allowed to be up during the daytime, and this, perhaps, will account for its occurrence.

More patients have been vaccinated with lymph diluted in the same way, but the results are not yet known.

February, 1871.

ON A

NEW AND SAFE MODE OF DELIVERING IN ARM PRESENTATIONS,

AFTER THE USUAL MODE OF TURNING HAS FAILED OR BEEN IMPRACTICABLE.

BY PARK B. TUCKER, M.D.

MRS. A——, age twenty-nine years, wife of a private of the 61st Regiment, mother of two children, was taken in labour on the 14th May, 1870 (a midwife being in attendance). Next day it was discovered that the arm had descended after the escape of the waters. Alarm was taken, and the Assistant-Surgeon of the Regiment was called in, who endeavoured to turn; but, failing to do so, called another surgeon, with no better success. On consultation they properly resolved to hand the case over to a more experienced civil practitioner, a Dr. Rees of this town, who, after repeated trials, also failed to relieve the poor woman. On the 18th Dr. Rees advised the husband to call on me. After manipulating, I found it was impossible to turn the child, and I resolved to repeat an operation which I had successfully performed some years ago in a similar case. Having placed the patient as for lithotomy, I perforated the body of the child and emptied the abdomen and thorax sufficiently to enable me to reach the bodies of the spine of the fœtus, and crushed the same with a pair of tooth forceps (having no better instrument at hand), using the index finger of the left hand as a guide. The same happy result followed as in my previous case—viz., bending of the body, and its descent sufficiently low to enable me to pass a handkerchief round the child, when, making traction, the pelvis and lower extremities soon descended, followed by the trunk and placenta. The child was a very large one.

The poor woman suffered comparatively little, and made a good recovery, as will always be the case if proper care is taken not to make too large an opening for manipulating with the forceps. I consider this mode of proceeding much safer than embryotomy, for the soft parts cannot be injured if precaution is used during the operation; and, moreover, the child is not much mutilated, which is always agreeable to the friends. Instead of tooth forceps I would recommend a pair of spring-cutting blunt pliers, with long arms, such as are used by dentists for cutting off incisor teeth, but on a much larger scale, which would greatly facilitate the operation.

I have to express my grateful thanks to my friend, S. W. Handy, Assistant-Surgeon of the 61st Regiment, who most kindly and ably assisted me with the case throughout.

Bermuda, Jan., 1871.

DR. GAMBERINI announces a second edition of his work on diseases of the skin. The book is a great favourite in Italy, the learned author being professor of syphilography and dermatology at the University of Bologna.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF PERFORATING ULCER OF THE DUODENUM.

(Under the care of Dr. WADHAM.)

THE following case, for which we are indebted to Dr. Cavafy, the medical registrar, is interesting on account of the difficulties which surrounded the diagnosis. The patient presents himself suffering severe abdominal pain: in the first place, it is discovered that a hernia has descended, which he has been unable to reduce; and, secondly, it is found that his system is contaminated with lead. The post-mortem reveals a perforating ulcer of the duodenum.

Henry H——, aged fifty-six, a painter, applied at the hospital on the morning of Feb. 3rd, complaining of violent abdominal pain, which had come on suddenly a short time before. He was the subject of an old hernia, which had come down, and which he was unable to return. Reduction was easily effected, but, as the pain continued, he was ordered a dose of castor oil and laudanum and sent to bed. When seen by Dr. Wadham, at about 2 P.M., he was suffering intense agony, twisting and writhing about on the bed from the violence of the pain. Pressure seemed to give him slight relief. The pulse was 120 and of fair strength, the tongue moist and tolerably clean, and the skin cool. The bowels had not acted for four days. As the patient was a painter, with a well-marked blue line on the gums, and gave a history of three previous attacks of severe abdominal pain, lead colic was diagnosed, and he was ordered three grains of calomel with one grain of opium, and a draught containing a drachm of sulphate of magnesia every four hours. About half an hour later he vomited, and when seen in the evening by Dr. Jones the pain was as severe as ever. As he had passed no motion since admission, a copious oil enema was administered; this was followed by two stools; but at about 11 P.M. he vomited several times. At midnight he was seen by the house-surgeon, who found that the pain was very severe and increased by pressure. A morphia draught was given, but without relief; and the patient died at 2.45 A.M., fourteen hours after admission.

The post-mortem was made by Dr. Whipham thirty-eight hours after death. Evidence of recent peritonitis was found, the small intestines being matted together by soft lymph. On the anterior surface of the first portion of the duodenum, just beyond the pylorus, there was a small perforation of the size of a pea, with clearly cut edges; this was caused by a small ulcer, the edges of which were not thickened. The mucous and muscular coats were only slightly more destroyed than the serous. No other ulcer was found. The kidneys were granular; the cortex diminished; the capsules adherent.

GUY'S HOSPITAL.

NECROSIS OF THE LOWER JAW; REMOVAL OF THE WHOLE OF THE ASCENDING AND PART OF THE HORIZONTAL RAMUS; RECOVERY, WITH GOOD MOVEMENT.

(Under the care of Mr. THOMAS BRYANT.)

THE following notes are by Mr. R. S. Mutch:—

Sarah B——, aged five years, was admitted with a swelling over the angle of the left inferior maxilla. The ascending and horizontal rami were both somewhat thickened. In the part of the cheek covering the angle of the jaw was a sinus leading to dead bone. Motion was only

slightly impaired. It was found that all the temporary teeth were present in the upper jaw, and on the right side of the lower jaw; but on the left side of the latter were seen two incisors, and the canine, which was slightly everted. Behind this was a space corresponding to the two temporary molars; beyond the space stood the first permanent molar, apparently fully cut in front; and to the outer side of it lay exposed a portion of apparently dead bone. The soft parts on this side were somewhat thickened. The child appeared in other respects to be in good health.

The history was to the effect that nearly a year and a half ago the patient had been confined to her bed for two weeks with a fever, in the course of which a swelling had made its appearance on the left side of the face, and had broken within the mouth. Since then some teeth had come away. Nine weeks previously she had become an out-patient; and while she was attending the hospital in that capacity a sinus had formed in the cheek, and Mr. Bryant had removed a portion of dead bone, together with one of the permanent teeth.

The patient having been placed under chloroform, Mr. Bryant attempted to remove the exposed piece of bone, but it was too firmly fixed. He then carried an incision along the outer side of the horizontal ramus, one inch forwards from the sinus. After several attempts, in which some small pieces of bone broke away, he succeeded in removing the whole of the ascending ramus, including the condyle, and part of the horizontal ramus. No constitutional disturbance followed the operation. She was discharged in eight days, much relieved, but with the sinus still communicating with the mouth.

When seen again, from two to three months later, she was able to move the jaw quite naturally.

WEST LONDON HOSPITAL.

FACIAL PARALYSIS FROM FRIGHT.

(Under the care of Dr. WILTSHIRE.)

IN the following case the cause of paralysis was peculiar and unusual. It is, doubtless, allied to those cases in which convulsions, loss of mental power, and like symptoms are produced by terror.

The patient was an intelligent little girl, aged five years, of whom the following account was given:—Four days previously she had been much frightened during her mother's absence from home. On the following morning the mother noticed that the child's mouth was drawn to the right side, and, thinking that she was playing with her mouth, scolded her; but it soon became evident that the distortion was not voluntary. On admission it was found that, when the face was at rest, the paralysis was not betrayed; but during crying or laughing the mouth was considerably drawn over to the right side. The left eye watered considerably; it could not be closed. There was no ptosis; nor were there any decayed teeth, enlarged glands, or evidence of the existence of worms. There was no otorrhœa or other symptom of disease of the temporal bone, nor squinting, nor paralysis of any other part of the body. The child was rather restless during sleep. A grain of bromide of potassium was ordered to be given three times a day; and thirteen days after admission the following note was taken:—"Has slept much better since taking the medicine. There is decidedly less paralysis. The left eye discharges a good deal, but is not inflamed." On the thirty-second day it was noted that there was "scarcely any evidence of paralysis remaining; in fact, the only sign is a slightly quicker and more complete blinking of the right eye than the left when one pretends to give the child a blow in the face." On the forty-sixth day the child ceased to attend.

Three months later the child was brought again to the hospital suffering from scarlatinal dropsy. It was ascertained that she had had no return of the paralysis, and presented no trace of it. No form of electricity was employed; the treatment consisted solely in the administration of bromide of potassium in three-grain doses—a therapeutic agent to which, Dr. Wiltshire thinks, the recovery can hardly be attributed.

STONE IN THE BLADDER; LITHOTOMY; RAPID RECOVERY.

(Under the care of Mr. TEEVAN.)

W. P——, a plump, healthy-looking boy, aged four, was brought to the hospital suffering from symptoms of stone. His mother had noticed that he had rubbed the private parts for the last six months, that he cried when urinating, and occasionally passed blood. Mr. Teevan detected a calculus on sounding; and in a few days the boy was put under chloroform. Having introduced a very short, rectangular staff, Mr. Teevan opened the bladder by a free lateral incision, and extracted with the left forefinger a small lithic-acid stone, weighing one scruple. After the operation there did not occur the slightest constitutional disturbance; the boy ate and slept well, and in six days began to pass water per urethram. Five days later all the urine passed the natural way. The wound was quite healed on the twentieth day, and, when the child left the hospital a few days later, he did not suffer from incontinence of urine.

Mr. Teevan remarked that this case exhibited the merits of cutting a stone out of the bladder rather than tearing it out by the pseudo process of dilatation, for the child made a rapid recovery, and was free from that distressing sequel of lithotomy, incontinence of urine, which so often follows what he termed the lacerating method of dilatation. It was impossible to extract even a small calculus from a child without either tearing or cutting the deep fascia, inasmuch as the prostate was quite rudimentary till the age of puberty, and there could, therefore, be no doubt as to the impropriety of the method of operating by dilatation. To the use of a limited internal incision were attributable all those difficulties and accidents which have occurred in operations on children, for, if the aperture were insufficiently large to admit the forefinger, the bladder would be pushed up into the abdomen, away from the staff, or the surgeon would find himself groping about in the ischio-rectal fossa. The median operation was not justifiable, for it was attended with a larger mortality than the lateral operation, and was more likely to cause permanent impotence.

Provincial Hospital Reports.

DEVON AND EXETER HOSPITAL.

EXCISION OF SUPERIOR MAXILLA.

(Under the care of Mr. ARTHUR J. CUMMING.)

THE following case is reported by Mr. Edw. J. Domville, house-pupil:—

Mary Ann C——, who appeared on admission to be healthy in every other respect, complained of considerable pain and inconvenience arising from a tumour, which was situated on the right side of the face, and had been gradually increasing in size from the time she first noticed it, six months previously. It occasioned considerable deformity, was apparently about the size of an ordinary hen's egg, elastic to the touch, and did not involve the skin. The growth apparently took its origin from the antrum, and extended thence to the orbital and palatine processes, having destroyed and protruded through part of the floor of the orbit.

Chloroform having been administered by means of a tubular inhaler applied to one nostril, Mr. Cumming carried his incision from below the inner angle of the orbit along the side of the nose, round the ala, and through the median line of the lip. The flap thus obtained was dissected back. The condition of the orbit having been examined, the malar end of the zygoma, the external angle of the orbit, the internal angle, and the arch of the palate were successively divided with straight forceps. The loosened mass was drawn forward, and the soft parts by which it remained attached were divided with a knife; it comprised the whole of the superior maxilla and the tumour, which was undoubtedly malignant, the malar bone, and the floor of the orbit. Some of the adjoining parts being observed to be invaded by the morbid growth, they were subjected to the actual cautery. The hæmorrhage, which was inconsiderable, and proceeded mainly from small branches of the facial artery, was immediately arrested by the cautery;

only one small vessel required ligature. The facial wound was brought together by wire sutures, and the incision in the lip by two pins and twisted sutures. The cavity was filled up with dry lint, and the patient was ordered ice to suck; she bore the operation very well, only complaining of a slight headache.

On the following day there was considerable discharge from the wounded surface, and the patient was directed to make use of a chlorate-of-potash gargle. Her diet consisted of nourishing liquids.

Four days after the operation the external wound had healed, but strapping was applied as a support. On the thirty-sixth day she became an out-patient.

The ultimate result of this formidable operation was very favourable. There ensued no displacement of the eye, and remarkably little facial disfigurement.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, JAN. 29TH, 1871.

MR. GAY, PRESIDENT, IN THE CHAIR.

CLINICAL EVENING.

SEVERAL communications of interest were brought under the notice of the Fellows during the evening.

I. OBSTRUCTIONS IN THE EUSTACHIAN TUBE.

Dr. PETER ALLEN read a short paper, in which he described the methods most recently devised for overcoming obstructions in the Eustachian tube, especially such as result from catarrh, and also for inflating the tympanum, with the latest improvements made upon the instruments in use for these purposes. The subject was introduced by a brief sketch of the functions of the parts intended to be influenced, the different methods hitherto adopted, and their relative value. The method particularly dwelt upon, for its high practical value, simplicity, and general efficiency, was that named after its originator, the "Politzer method," which may be shortly described as follows:—The surgeon places the tube within either of the patient's nostrils, or, with Dr. Allen's most recently improved contrivance, simply presses the nasal pad gently and firmly against them. The patient then swallows, by degrees, a small quantity of water previously taken into the mouth; and the surgeon, at each successive act of deglutition, compresses the air-bag held in his own right hand. Currents of air are thus repeatedly sent into the naso-pharyngeal cavities, driving warm air into the tympanum through the Eustachian tubes, and overcoming at once any moderate degree of obstruction in the latter. The modifications of this appliance, introduced by Dr. Allen, consist of an interior valve, enabling the acts of inflation to be repeated as often as desired, without the necessity of removing the instrument from its position; and also of the double pad placed against the nostrils of the patient, thus dispensing with the rather disagreeable and troublesome procedure of inserting the tube into the nostril. Even young children do not cry, nor are other persons frightened, at this simple and easy mode of managing inflation. It causes no pain or distress, and the results are often at once so happy as to astonish the patient.

Personal testimony was borne by one of the Fellows present to the immediate relief afforded him, when suffering from catarrhal deafness, by Dr. Allen's use of the described apparatus.

II. TRANSFUSION OF BLOOD.

Dr. RICHARDSON said that for the last twenty years he had been trying to get satisfactory instruments for the performance of this operation, and he had now obtained what he wanted. Transfusion was one of the most simple or most troublesome operations, according as details were perfect or imperfect. These details had reference to the needle, the knife, and the passage of fluid into the vein. As to the needle, he believed he had obtained a satisfactory one. It was curved, probe-pointed, and with an opening in the under side at the top, curved so that when introduced into the vein, if the end was held down, the apex applied itself to the upper wall of the vein, whilst the under side of the needle was free, and allowed the blood to escape. The straight needle comes in contact with the vein, so that the latter blocks the opening for the escape of blood. As to the knife, it should be one to enter the vein at once, having a small blade with a cutting edge along the entire of one side, and only for about one-eighth of an inch on the other, so that the vein might be punctured at once and the needle pushed in so as to cut the upper wall of the vein and the skin together, and so that the vein should not be laid bare, for then it rolls uncomfortably. As to the passage of fluid, all syringes were bad. No force is really required. The mere matter of elevation of the vessel containing the blood above the patient is sufficient. Dr. Richardson then described a vessel he had constructed. It is constricted at the base and then widened out gradually to the top. At the constricted part a wet valve is formed by a floating ball when the vessel contains fluid and this fluid gets low in the vessel. From the lowest part of the vessel is an arm attached to a tube, and this tube is connected with the needle, the fluid from the vessel finding its way along the tube to the needle. In transfusion it was only necessary to fill the vessel and elevate it above the level of the body when the needle was introduced into the vein. Dr. Richardson entered into considerable detail as to the various fluids that might be injected, and the conditions of disease in which these might be used, and mentioned that he had tried without result to find some substance that we could use to feed by the veins; but he was now taking blood and manufacturing from it a blood-powder, which, on the addition of water to it, produces a fluid having all the characters of blood, and he hoped soon to get a "blood-powder" that might be very usefully employed in transfusion.

A very brief discussion took place in reference to the utility of transfusion in different diseases.

III. STRANGULATION OF INTESTINE BY A SOLITARY BAND.

A case of great surgical interest was related by the President. It was that of a man in whom strangulation was reduced by a process of kneading. The man was twenty-seven years of age, and phthisical. For two years he had suffered from sudden attacks now and again of pain to the right of the umbilicus, vomiting, and intestinal obstruction. He used to go to bed, and after a while get up well. He went on in his last attack for a week with the usual symptoms, and then Mr. Gay saw him. He was low and depressed, vomiting stercoraceous matter. There were no symptoms of the more common causes of obstruction, and the diagnosis was made of constriction by a band. The man would not consent to an operation, and so Mr. Gay got two men to hold the patient with his head downwards, whilst the belly was kneaded from below upwards *quoad* the body, the bowel being directed backwards from the supposed band, whose seat appeared to be indicated by the one painful spot about the umbilicus. The vomiting at once ceased; the belly remained tender, but by and by got more comfortable; the patient asked for food very soon, his bowels acted, and he got well. The man subsequently died of phthisis, and by no way whatever could a post-mortem be obtained. Mr. Gay said that the diagnostic points of strangulation by a solitary band are as follows:—An antecedent history of some disease of the mesentery or bowel, the band being the result of the deposit of reparative lymph; the occurrence of symptoms pointing to the right side as the seat of constriction, and at about twenty-five years of age; and the absence of any symptom of intussusception, such as tenesmus, or of tumour.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The next meeting will be held this (Saturday) evening, at 7.30, Mr. Robert Druitt, President. The discussion on Dr. Barnes's paper, on the question "How far is the present prevalence of Small-pox to be attributed to the plan, recently introduced, of limiting the numbers of Public Vaccinators?" will be resumed by the President reading a short paper "On Revaccination." The adjourned discussion on Dr. Spencer Cobbold's paper entitled "Entozoa in relation to the Public Health, especially as regards Sewage Irrigation," will be resumed by Dr. Letheby, previous to which Dr. Cobbold will read a supplementary paper "On Sewage and Parasites, especially in relation to the dispersion and vitality of the Germs of Entozoa."

Reviews and Notices of Books.

Insanity and its Treatment: Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. FIELDING BLANDFORD, M.D. Oxon., F.R.C.P., Lecturer on Psychological Medicine at the School of St. George's Hospital, London. Small 8vo. pp. 435. Edinburgh: Oliver and Boyd. London: Simpkin and Marshall.

Body and Mind: an Inquiry into their mutual influence, specially in reference to Mental Disorders. Being the Gulstonian Lectures for 1870, delivered before the Royal College of Physicians. With Appendix. By HENRY MAUDSLEY, M.D. Lond., F.R.C.P., Lecturer on Medical Jurisprudence in University College, London, &c.

THE simultaneous publication of these two books is an encouraging sign of the times for those who wish well to the study and treatment of mental diseases. The authors are each of them representatives, we are inclined to say that they are the only complete representatives, among English psychologists, of the spirit of modern inquiry as applied to mental pathology and medicine. For although nothing is more common than the assertion—even the ostentatious assertion—by alienist writers, that the inductive method of research is the only fruitful one, we constantly find them arguing deductively from complex phenomena of consciousness, the nature of which they have taken for granted, and not understood. That Drs. Maudsley and Blandford have successfully avoided this error is due, in our opinion, to the fact that they have qualified themselves for their task by acquiring, *inter alia*, a sound knowledge of the history of psychological philosophy, and an adequate appreciation of the phrases and the forms of thought in common use among logicians, with which we cannot honestly credit some other modern English alienists, who, nevertheless, engage with surprising confidence in war to the knife against the "*high priori*" psychologists. It is a dreadful spectacle, and one that we hope may soon cease out of the land, that of a clever and well-educated lawyer cross-examining an average mad-doctor as to his ideas, for instance, on the subject of moral insanity. You feel that the whole thing is a juggle, and about as fair as a combat between Jem Mace and some big, muscular, but utterly untrained Somersetshire farmer. Let us hope that, under the influence of clear and definite teaching, of which, we hope, the books before us are only a small first instalment, the race of alienists who do, indeed, know a certain amount of practical mad-doctoring and a certain modicum of nerve physiology and pathology, but only *think* they know anything about the laws of thought, will speedily disappear.

The respective aims of the two works under review are widely distinct; and we have only coupled them together because they are in many respects complementary of each other, and are the handiwork of men who, on whatever points they may disagree, are at least in full accord as to the worthlessness of metaphysical psychology, and the necessity for terminating the barren strife over such phrases as "materialism" and "spiritualism," which convey no useful ideas whatever. The aim of Dr. Maudsley is, in the main, to lay down principles of inquiry; that of Dr. Blandford to furnish true pictures of mental diseases, free from the distorting influences of a classification based on exploded philosophical notions. If we speak at less length of Dr. Maudsley's work than of Dr. Blandford's, it is because the former has already attracted a good deal of notice, as the Gulstonian Lectures were delivered to large audiences at the College of Physicians, and were afterwards republished in THE LANCET. And unquestionably the most pressing need just now is for sound teaching as to the actual varieties of insanity to be met with in ordinary practice, and as to their treatment, not only in regard to moral and medical considerations, but also as to the legal relations in which the medical man and the friends of a patient are placed towards him, and the legal steps which it may be necessary to take. So important is this last small matter, that we notice it first of all, for fear we should forget it.

Dr. Blandford's experience has led him to the conclusion that the majority of practitioners are in ignorance, not merely of the more complicated legal relations of the insane, but even of the ordinary legal forms that have to be observed in putting lunatics under temporary restraint. We recommend to general notice the 19th chapter of Dr. Blandford's book, in which they will find what we believe to be the only existing account, in a medical work, of all the forms and precautions which are to be observed in committing lunatics to restraint (either in asylums or in private houses); of the mode of dealing with pauper lunatics; and of the proceedings of Commissions of Lunacy. These matters are described with a satisfactory clearness; and it is desirable that every member of the profession should familiarise himself with them.

We may mention that the final chapter contains a description of the mode of examining suspected lunatics. It is full of valuable information and suggestions, for which, doubtless, many a general practitioner would have been most grateful when placed in presence of cases that have baffled all his ingenuity, or threatened to land him in some awkward legal dilemma.

Dr. Blandford commences his book with two chapters which are devoted to so much of the physiology of the nervous centres, and of the phenomena of healthy mind, as are absolutely necessary for understanding the significance of the various symptoms of insanity. We think that he has done this preliminary part very well, and it must have been difficult to present the topics in so concentrated a form without confusion, which he has certainly avoided. As regards classification, he lays down the principle that there must really, in the present defective state of our knowledge, be two ways of doing this, both of which we are practically obliged to use; the first a pathological and etiological one, the second a clinical one. The clinical classification—that is, the arrangement of the forms of insanity according to their symptoms—forms the main subject of this book; but we may notice that, as regards pathological and etiological arrangement, Dr. Blandford bases himself mainly on the system of Dr. Skae, the great merits of which he candidly allows, and predicts that all future classifications must, in the main, follow upon the same lines. It has the great advantage that it rests on broadly marked distinctions between various physiological states, and between these, again, and the influence of certain toxic and other external agencies. It may be said to have formed the first practicable basis for a physiological pathology of the mind. Nevertheless, as Dr. Blandford points out, it by no means sufficiently recognised the supreme importance of the hereditary influence of the *insane neurosis*, an influence which, though long since referred to by various writers, and even elaborated with some ingenuity by Morel, and by Moreau of Tours, was never set before the profession with adequate force and impressiveness till Dr. Maudsley dealt with it in his remarkable work "On the Physiology and Pathology of Mind." To that doctrine Dr. Blandford fully adheres, and his present volume contains numerous illustrative instances of its importance.

One of the most direct and most satisfactory consequences of the substitution of a *bonâ fide* physiological for a wholly or partly metaphysical classification of mental diseases, is

seen in the place now accorded to emotional disturbances of mind. Looked at from the physiological point of view, the phenomena of emotion are sooner or later seen to be mere accompaniments of intense motor acts; they represent the *feeling of the ideas*, whether purely intellectual or motor, which are passing in the brain. It was impossible that physiology should long remain at the point of view of Schröder van der Kolk, who assigned a distinct location (in the posterior part of the encephalon) to the organs of emotion. No separate centres of emotion can now be admitted, and to Dr. Blandford belongs, in no small degree, the credit of bringing this clearly into view, especially in a paper published some time since in the *Fortnightly Review*, the pith of which is repeated in the present work. Separate emotion centres were readily conceived of, and rather caught at, in the earlier days of the theories of moral insanity; and the common idea, among the less advanced psychologists, seems still to be that the impulses are separated by anatomical situation so completely from the intellectual faculties that they may be exclusively diseased without any particular harm happening to the mind generally. This view expresses a transitional state of psychological physiology which cannot now last much longer, but which has lasted long enough to do almost as much mischief as the other extreme absurdity—so dear to the narrow legal mind—that a man cannot be insane unless he has fixed intellectual delusion. The death-blow is pretty well given in this volume to any further chance of the acceptance, by reasonable men, of either of these theories.

The practical parts of Dr. Blandford's volume are executed in a manner which will make them very useful to busy practitioners. They afford a series of clear sketches of the actual varieties of insanity met with in practice, which are at once more accurate and more comprehensive than any which have previously appeared in English manuals. For instance (with all due respect to two authors who, in their day, were no doubt useful), when we compare the work of Bucknill and Tuke with Dr. Blandford's book, we must decide that the former is decidedly inferior: yet for years it has been looked on in this country as the standard authority. If anyone will refer to Bucknill and Tuke (after reading their latest successor), he will be at once struck with the thinness of their descriptions, and the entire omission of some important matters. With regard to practical points of treatment, especially in relation to the all-important matter of feeding, Dr. Blandford affords useful guidance; and there is one point with respect to which we would wish to direct particular attention. He urges the adoption of greatly increased allowances of food, but *not* of stimulants, to nearly all the chronic cases of insanity, and also to those numerous waverers on the verge of insanity who are included under the description of "eccentrics" and "hypochondriacs." We believe that a neglected, but most important, truth is here indicated. We have ourselves frequently observed the correctness of the author's statement that the foul tongue and apparent want of appetite which so often discourage the physician from insisting on large supplies of food, especially of solids, are extremely misleading; and that it is really best in every way to persist in the attempt to give even double quantities of food, both liquid and solid. *L'appetit vient en mangeant* in most of these cases; and, so far from any digestive disturbance following, the digestion nearly always improves most visibly. Very important, in connexion with the question of feeding our patients, are Dr. Blandford's remarks on the best mode of administering food by force, a most troublesome and perplexing business, as too many of us have found out for ourselves.

The concluding two chapters of the book consist of the useful directions on legal matters which we have already mentioned; and of a practical description of the process of examining suspected lunatics.

The general impression left on our mind by this book of Dr. Blandford's is excellent; and we predict that it will have a great success. Nevertheless, there is one point with regard to which, before concluding this notice, we must express our dissent from the author's opinions. In his interesting remarks on the Etiology of Insanity, he makes out a strong case, we think, for the belief that there is a real increase in insanity of late years; and that this increase is confined almost entirely to the lowest orders of society. From this he proceeds to the inference that alcoholic intemperance must be by far the largest factor in the lamentable occurrence; observing, that this is the only influence at once adequate to produce the result in question, and confined in its operation mainly to the class among whom the result is actually seen. For our own part, we have no wish, most assuredly, to speak lightly of the curse of alcoholic intemperance; but this particular charge against alcohol we are by no means prepared to accept. Let us take, for example, that very county—Wiltshire—where the total proportion of lunatics to population, and also the increase of recorded lunacy during recent years, are most distinct. Does Dr. Blandford know what the weekly wages of the miserable agricultural labourers of Wilts amount to? *Less than ten shillings a week on the average*, to our personal knowledge.* Can much beer be drunk out of this? Scarcely. Not that the average Wiltshire clodhopper will decline any available opportunity of fuddling himself; but he simply cannot get more than very limited chances that way. He is a bread-eating creature on six days out of the seven; he sometimes does, and sometimes does not, taste a morsel of bacon or of meat on Sunday; and in his wildest flights of imagination he can picture to himself no whitest feast-day on which he can ever hope to drink more than about two quarts of very thin and weak beer at his own expense. Of course there are times, like that of harvest, when some foolish farmers allow their labourers excessive and ridiculous quantities of beer; but this is only once in a way, and few such opportunities occur in the course of the labourer's ordinary life. Now, in looking backwards over the last twenty or thirty years, and asking ourselves what is the probable cause of the large and increasing amount of lunacy among the Wiltshire poor, it seems to us that there is far greater probability that insufficient food, than that excessive drink, was the main cause. And although lunacy has also much increased in many other districts where the excessively low diet cannot be supposed to have been the cause of mischief, yet other causes than that of intemperance could be easily named; as, e.g., the general increase of rapidity both of thought and of action in recent times—the keen competitive strife for existence, which must sorely try the nervous systems of the artisans in manufacturing districts. Heaven knows that alcohol has enough to answer for; but it will take much more stringent proof than anything we have yet seen to convince us that it ought to bear this special blame. Nay, we even sincerely lament the fact that attention has been so much concentrated on this hypothesis of the causation of insanity, since it has probably been diverted from other matters, and especially that of insufficient food, which ought to have been more generally studied.

Dr. Maudsley's treatise, though far from lacking practical interest and applicability to the medicine of every day, derives its chief value from the general view it affords

* The writer well recollects a time, previous to 1846, when wages (in nearly half the county) were six shillings; and this with bread at Corn-law prices!

of its distinguished author's position with regard to mental science; and it must be allowed that that position is a very important one. The author is an uncompromising advocate of the doctrine, that the cast of our minds, their prominent features, their besetting mistakes, their liabilities to special derangement, are due in by far the greatest part to an inherited organisation, from the "tyrannous" influence of which we cannot hope by any possibility to escape. And, assuredly, it was high time that this view, the very existence of which has been so long ignored by metaphysicians, and by the clergy, whose especial duty it was to take it into careful consideration, should be strongly stated, and, as it were, forced upon the notice of the non-medical world. It is put forth in Dr. Maudsley's book with a power and a copiousness of illustration previously unexampled. Not merely does he work out the views already expressed by Morel, of the perpetuation, through successive generations and under Protean forms of the neurotic disposition, but he advances what seems to us an even more interesting argument. He shows how completely the Darwinian hypothesis, of continuous development from lower to higher forms, agrees with all that we can observe of the healthy development and of the morbid degenerations of mental functions. He shows that not merely does the human brain sum up in itself the leading forms of the vertebrate type, but the brute nature seems unquestionably to persist within us, requiring only certain arrests or alterations of the normal development to cause its inevitable reappearance. If we inherit the accumulated brain-education of our nearer ancestors, so, also, we inherit their accumulated defects, and in proportion as they, by the faults or the misfortunes of their lives, have tended to relapse toward lower grades of organisation, so do we, at birth, start from a lower level, and with an added tendency to degeneration.

In some respects it seems to us that Dr. Maudsley overrates the practical consequences of the "tyranny" of our inherited organisation. He seems hardly to take due account of the extent to which this tyranny is modified by the effects of the mixture of races. And he does not dwell enough on the fact that even the intermarriage of two persons, each of whom belongs to a markedly neurotic family, is rendered comparatively harmless when the individuals are each of them the healthiest members of their respective families; and surely this is a most practical matter, as is also the avoidance of intermarriage by near relations whose common ancestors have been strongly tainted with the neurotic tendency. These things have no doubt occurred to Dr. Maudsley, but we do not remember that he anywhere states them with as much distinctness as would be desirable, and the result is, that a somewhat unnecessarily gloomy picture of the future of civilised men is likely to present itself to the minds of many readers who remember how widely the neurotic taint is spread, and how persons can really console themselves with a belief that their own family tree has escaped its contagion.

It would take far too long to enter into the other great objection which we make to Dr. Maudsley's doctrine—viz., on the score of its excessive moral necessitarianism. We are very far from sympathising with such extreme views respecting the mind's independence of corporeal influences as are professed by the Archbishop of York in the "Discourse on the Limits of Philosophical Inquiry," on which Dr. Maudsley (Appendix) expends such severe criticism; they seem to us mere nonsense, the product of a total ignorance of physiological facts. But, on the other hand, we maintain that the expression, "No one can escape the tyranny of his organisation," conveys an idea of the helplessness of the human individual which is distinctly in excess of the reality. If Dr. Maudsley had said that everyone is inexorably called upon to submit to the tyranny of his organisation, *unless* he will fight strenuously against it, that would more truly express the facts of the case. Demonstrative proof of our theorem is, we grant, impossible. But not to dwell upon the inextinguishable sense of personal freedom which human minds (in any but the most diseased conditions) seem invariably to possess, we would rest our case on the impossibility of accounting otherwise for the preservation, still less for the growth and constantly increasing refinement, of virtuous ideas and feelings among the human race. But upon such subjects as this it is useless to attempt to argue in the brief space of such a review as we can give. Enough to say, that Dr. Maudsley's book is a representative work, which everyone must study who desires to know what is doing, in the way of real progress and not mere chatter, about mental physiology and pathology.

REPORT
OF
The Lancet Sanitary Commission
ON
PUBLIC VACCINATION IN THE METROPOLIS.

ST. LUKE'S, MIDDLESEX.

ST. LUKE'S is one of the two metropolitan districts in which the Vaccination Act of 1867 has been really carried out. The guardians have been particularly fortunate in securing a young and energetic vaccinator—Dr. Yarrow of Old-street; and he is ably supported by the inspector of vaccination, Mr. Neighbour. The parish of St. Luke extends over 220 acres, and contains a population of about 65,000. The number of births last year was 2447; and there were successfully vaccinated at the public station 938 children under one year, and 53 over that age: total, 991. There was only one failure in each class. The station is fairly placed, in the midst of a very dense population. It is large, light, and admirably adapted to the purpose. At the time of our visit there were nearly 200 people in it, and yet there was neither confusion nor crowding. The names and addresses are taken at the entrance; and the children preparing for vaccination are arranged and numbered by the inspector of vaccination, who attends for the purpose of rendering most important services and of receiving instructions from the public vaccinator as to defaulters &c. 95 children had been vaccinated the week previously, and 107 were awaiting the operation, besides 12 persons for re-vaccination. The work was all done in about three hours and a half. There was a good selection of healthy vesicles of a fair size. Dr. Yarrow vaccinates on one arm only, but in five or six places. He is the quickest operator we have seen, and is remarkably successful. No lymph is used from children over four months old. Dr. Yarrow thinks this a desirable limitation, as the irritation of teething is liable to derange the health for some months afterwards; and when the children are older, their health, in his very poor district, is often deranged by neglect, dirt, bad living, &c.

Dr. Yarrow says that any opacity in the lymph is sure to produce inflammation of the arm; and he related a remarkable experience on the question of propagating syphilis. He vaccinated twelve healthy children from the arm of a child five months old, free from eruption at the time, and having fine vesicles. When the certificate was produced for the purpose of filling it up, there was found to be a certificate postponing the vaccination for two months, in conse-

quence of hereditary syphilis, signed by one of the assistant-surgeons of St. Bartholomew's. Dr. Yarrow watched the twelve children with great care for one month, and directed the mothers to apply to him in case of any untoward symptoms. Nothing, however, was seen in any of them, and he has had no complaint since.

Ninety per cent. of the children vaccinated one week are brought up the week following for inspection. The certificate of successful vaccination (Form D) provided by the Act is regularly prepared and given out. Although the giving of this certificate is not compulsory (indeed, we have only seen it at one other station), the gift operates most favourably, by inducing the parents to return on the day appointed for inspection. The remaining ten per cent. are visited by the inspector *the same afternoon*, and they are ordered either to take the children to Dr. Yarrow's house for inspection, or to bring them up the following week. Not a single child therefore escapes inspection. A good idea of the perfect manner in which the Act is carried out in St. Luke's may be formed from the half-yearly report made to the guardians by Mr. Neighbour in the autumn of last year. Of the children (say 1200) born between Michaelmas, 1869, and Lady Day, 1870, the registrar reported that all had sent in certificates of successful vaccination except 127. With these the inspector had to deal, and he reported that 16 were under vaccination; 6 had in fact been vaccinated, but had lost their certificates, and had not on that account returned them to the registrar; 4 children had died; 27 were reported medically unfit; 71 had left the parish, and notices had been sent to the registrars of the districts into which they had removed; leaving only three defaulters. Dr. Yarrow applied to the Board of Guardians for power to prosecute if he found it necessary; and the power having been given, two out of the three at once submitted, and the third has since died. In January, 1871, the registrars returned 167 defaulters. These have all been visited within the last few weeks, and a return has just been made showing that 26 had been vaccinated; 4 died; 22 were not in a proper state of health; and the large number of 95 had removed to other localities, some of them with the express object of escaping vaccination in districts where the inspectors are not so strict. From these two statements, it follows that the history of every child born between Michaelmas 1869 and 1870 is accurately known; and as this system has been in operation since October, 1868, there are few, if any, unprotected children in St. Luke's between the ages of three months and two years. This is proved in a most interesting manner by the fact that, out of 85 cases of small-pox which have occurred in the parish since the 30th September last, only 3 children between those ages have been attacked. Two of these were less than five months old, and in one, which died, there was constitutional disease. The ages of the persons attacked prove conclusively that the epidemic chiefly exists amongst persons between three and twenty years of age, the numbers being, between three and ten, 29; between ten and twenty, 36; between twenty and thirty, 10; and only 3 were over thirty years of age. As many of these persons had been vaccinated, we have the strongest possible evidence of the necessity of revaccination at the age of puberty. It is also to be remarked that, out of 284 vaccinations done in January, no less than 107 were of children born before the Act came into operation. There is every reason, therefore, to believe that there is in every part of London a very large number of unvaccinated persons, and it is to meet this difficulty that an additional inspector has now been set at work in St. Luke's. He will visit from house to house, and room to room; he will inspect the arms of all who will permit him to examine them; and he is instructed to urge all unvaccinated persons to be vaccinated, and all persons who have not recently been revaccinated are to be recommended to have it done at once, particularly if they are exposed to the risk of contagion.

It is only lately that revaccinations have been done on an extensive scale. The guardians issued a letter of instructions, urging revaccination, on the 16th January, and 185 had been done up to the 1st of February. There is at present scarcely a public institution in the parish of which the inmates have not all been revaccinated, many of them with remarkable success. The panic has driven a large number of adults to present themselves for primary vaccination. Last week a woman was vaccinated at sixty-nine years of age.

Dr. Yarrow has received from the Privy Council a handsome acknowledgment of his services in the shape of a premium of £44 4s. He is also employed to supply them with lymph, but such is the pressure of work that he only sent in sixty-five charges three weeks ago, and it is not too much to say that hundreds of well-formed vesicles have since been sent away from the station untouched. Every facility is given to medical men for obtaining lymph, but Dr. Yarrow does not think proper to supply points, tubes, and labour gratuitously, and he rightly objects to make a charge. It seems a great pity that, with such a general demand for lymph, so much should be allowed to run to waste; and we again hope that the Privy Council will take some steps to secure a larger supply for general use; indeed, we can see no reason why a store of 10,000 tubes could not always be maintained to meet emergencies.

Foreign Gleanings.

ANEURISM OF THE GLUTEAL ARTERY.

PROFESSOR GALLOZZI of Naples had to treat a boy of sixteen, who, from a stab in the right gluteal region, presented after some days an enormous tumour, occupying the whole of the above-mentioned locality. The question now arose whether attempts should be made to reduce the tumour by injection of coagulating fluids, or by emptying the sac and seeking for the gluteal artery, or by tying the external iliac. After due consideration, the latter measure was preferred. The vessel was deligated in the usual manner, and the boy recovered perfectly. Although the main-vessel operation is serious, it certainly holds out more chances of success than those which the professor had thought it prudent to discuss.

INJECTIONS OF PERCHLORIDE OF IRON AND MANGANESE IN FISTULOUS TRACTS AND HYDROCELE.

Professor Marcacci (*Annali di Chemica*) has published six cases of fistulous tracts connected with diseased bone, and seven of hydrocele, in which the solution marking six degrees was injected in small quantities, and left but a short time. Judging from the success obtained in these cases by the author, the practice is worthy of imitation. However, we should not forget Mr. Pollock's sulphuric acid plan in fistulous tracts, or the liquor of Villate, so much praised in France for the same pathological state. Nor have surgeons to complain of the injection of iodine or port wine in hydrocele. Professor Marcacci states very frankly that, in the latter complaint, the perchloride produced an ugly thickening of parts.

INJECTIONS OF ERGOTIN IN DISEASES OF THE UTERUS.

Dr. von Swiderski highly recommends, in the *Berl. Kl. Woch.*, No. 50, 1870, such injections in chronic metritis, displacements, and hæmorrhage. He uses different solutions according as the complaints are acute or chronic. The strong solution for acute cases is thus composed:—Watery extract of ergot, 37 grains; spirits of wine and glycerine, of each 2 drachms: the weaker for chronic cases. The effect is seen in one or two hours. The average dose for an injection is about three grains. Dr. von Swiderski relates, with full details, several cases of metrorrhagia, both simple and connected with parturition, versions and flexions, in which he obtained great success by injecting every other day for a week or less. Comparative trials with ergotin taken into the stomach, or injected under the skin, would be interesting.

RETENTION OF PLACENTA.

Dr. Rossi states, in the *Ungar. Med. Chir. Presse*, No 47, 1870, that, in these cases, when removal, especially after abortion, is impossible, he succeeded by injecting perchloride of iron into the uterus—equal parts of water and the perchloride. One case is related which was complicated with the extra-uterine presence of a fœtal head for the last three years. Abortion was induced, and the placenta came away, piecemeal, after injections of the perchloride into the womb.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 18, 1871.

IN presenting a more carefully prepared draft of THE LANCET Medical Bill to the notice of the profession and the Legislature, we do so with a conviction that the more closely its provisions are examined, the more favourably will it compare with any alternative proposal for perfecting the mode of admission to the profession, and so giving a stimulus to higher and better work to all the bodies now charged with the function of examining medical students. If this be so, we are surely not unreasonable in expecting the support of the bulk of the profession. Let us endeavour, in a few sentences, again to place the points of the Bill clearly before our readers.

First: Supposing our General Medical Council to be enacted, it would be the first Medical Council having any claim to be considered as representing the life and soul of the profession. The corporations are essentially social bodies. The scientific purpose of them is subordinated to considerations of etiquette and order and seniority. So powerful are the amenities which constitute the very atmosphere of corporations, that men are elected even to examinerships for no other reason than that they are older than their colleagues, and are getting too inactive for other duties. It is absurd that admission to the medical profession should depend on men elected for the discharge of examining duties on such principles. If it is unsatisfactory that corporations become ineffective bodies from the force of mere etiquette and seniority, it is still more monstrous that the said corporations should claim the right of constituting, either solely or principally, the General Council of the profession. And if there is one thing which surpasses this in wonderfulness, it is that such a claim of the corporations should have met substantially with recognition by a Committee claiming to represent the British Medical Association. It is fortunate for this Committee that the Association does not meet at present; otherwise, it would be asked by the independent members of the Association what the corporations and their representatives had done for the Association that it should seek to perpetuate their control over a medical education and examinations. Our Bill aims at procuring a Medical Council in which there shall no longer be an advocate of the individual examining bodies, and in which the public voice of the profession shall be expressed through men that represent the progress of medical knowledge and art. It is often said that medical men care nothing about this question of medical reform. The wonder would be if they did. What is the use of their caring about medical questions, when they have no power, no voice, and no vote in any matters touching medical education or the efficiency of our schools and teachers? We shall believe that medical men are apathetic on all these questions when they have had the chance of influencing the settlement of them.

Secondly: The Examining Board to be appointed under our Bill would be a matter of constant interest to the profession, and of constant regard by the corporations and universities. If the standard of it got too low, and complaints of inefficient men being passed into the profession transpired in public or in Parliament, the Medical Council would have to give account. Not being bound in the choice of examiners by any considerations of etiquette, it would be without excuse if it made bad appointments; and in making good appointments, it would not only directly raise the standard of medical knowledge, but it would encourage men of talent in the profession to aim at something else than immediate success in practice. It will be seen, in the later draft of the Bill, that we propose that the examinerships should be terminable.

Thirdly: The appointment of Inspectors of Examinations is a proposal which we flatter ourselves will certainly be accepted in one form or another. London, Edinburgh, and Dublin must have equal examinations. There must be no distinction of worth in the diplomas, either as regards the fee paid for them, or as criteria of professional knowledge. Then Edinburgh will not vex Dublin, and Dublin will not vex London. The equality and efficiency of the examinations will be tested by perfectly independent inspectors; and as the equality of the examinations will be secured, the licence will be an imperial and not a local one. It will be the licence of a Council representing the whole profession, not of a body representing a mere section of the great art of Medicine.

We appeal to all sections of the profession for support, at any rate to all medical men who think the reputation of the profession a greater thing than the interest of its mere corporations. It is easy to see the sinister features of another Bill, which shall be nameless, with its servile imitation of the Government measure of last year, and its bait to the corporations, leaving them to compose half the Council, and to nominate the new Examining Boards. Sops and compromise are easy ways out of great questions; but they have never been the way of THE LANCET, and we shall not take to such ways now. If the present opportunity of effecting great improvements in the profession is to be thrown away, and a new lease is to be given to the rule of nineteen competing bodies, the responsibility shall not rest with us. But we hope for better things. We trust ere long to see the great points of our Bill embodied in law: a small independent Medical Council; Examiners acting under the sole authority of the Medical Council, independent of the corporations, and paid independently of the results of their examination to the student; and an efficient body of Inspectors. Already opinion sets strongly in favour of these points; and if the profession will immediately hold meetings and discuss the question, we feel confident that the members of the Legislature will have instructions to support our Bill.

WE shall be curious to read the evidence upon which the Royal Sanitary Commission have arrived at the conclusion that the Vaccination Law is complete, and requires nothing but enforcing. Happily the Government had already pledged themselves that the House of Commons should have a com-

mittee on the subject; and we hope, with Mr. FORSTER, that the opportunity will not be lost to strengthen the machinery of administration, and to remove some of the very serious defects in the existing law. We are glad also to observe that the proposed inquiry will not be limited in its scope. Evidence is to be taken as to the operation of the law in Ireland and Scotland, where the absence of small-pox affords the most direct evidence of a complete success. Mr. W. H. SMITH informed the House as to the great difficulty of carrying out the law in London, in consequence of the migratory character of the population; and he very properly suggested that vaccination should be recommended to the parent at a much earlier date. He also drew attention to the divided responsibility which at present lies between the Privy Council, the Poor-law Board, the registrars, and the vaccination officers; in fact, if a district is ill-vaccinated, there is no one to whom the blame can be attached. Lord R. MONTAGU pointed out another great defect—namely, that in England the registration of births is not compulsory. In some parts of London it is notorious that 25 per cent. of the births are not registered; and, as the vaccination officer only acts upon the information of the registrar, a parent wishing to avoid the vaccination of his child has only to neglect to register the birth. But we rejoice particularly at the tone of Mr. FORSTER'S remarks. Committees of the House of Commons have an educational as well as a legislative duty to perform. We believe, with him, that, with the present amount of information on the subject, and a careful study of the relation between vaccination (and we hope the Committee will add revaccination also) and the spread and mortality of epidemic small-pox, suggestions will certainly be made for amending the law, and for making it more effective for removing opposition throughout the country.

The more we have inquired into the progress of the epidemic which now prevails, the more thoroughly are we convinced that it is in a complete system of vaccination and revaccination that the true preventive lies. Once give the small-pox a *locus standi* by even a partial neglect of vaccination, and we must acknowledge our impotence to stamp it out by isolation, disinfection, and other means of direct treatment. We cannot hope to check its progress in the densely crowded courts and stifling rooms of the poor. In the narrow streets it spreads from house to house. In Shoreditch there is a court of thirteen houses. Small-pox has occurred in Nos. 1, 2, 5, 8, 11, and 12. Twenty people have been attacked, and in one house six deaths have occurred. Workmen have positively refused to go and cleanse the rooms. In one street, small-pox has occurred in Nos. 10, 11, 12, 19, 22, 23, 24, 27, and 29. In twelve weeks 190 persons have died in this parish; and, at the very lowest calculation, there must have been more than 2000 cases within the last two months, or at the rate of 300 fresh cases every week. It is evident that such large numbers cannot be effectually dealt with on the principle of isolation in hospitals. At no moment have the authorities been able to meet the hospital requirements even of the pauper class. In a return published by the Shoreditch vestry it is stated that 16 persons were removed to hospital in the week ending Jan. 17th, whilst 106 remained waiting for removal; the week following 17 persons were removed, and 113 remained; in the next week 10 patients only were removed, and 103 remained; and in the week ending February 7th 29 persons were removed, and 130 remained: making a total in this one parish of 452 persons for whom there was no hospital accommodation—no means of isolation.

What is true of Shoreditch is true for the whole metropolis. Besides the cases in the small-pox hospitals, in which there are at this moment nearly 900 patients, there are upwards of 1000 cases under treatment by the Poor-law district medical officers in the homes of the poor; and, besides these, there are probably as many others under private medical practitioners.

But the distress caused by this epidemic is not measured by the number of persons attacked, nor by the heavy mortality. Shoreditch is a great workshop into which work of every description is taken from other districts, and the prevalence of small-pox has had the effect of cutting off the resources of the whole community. The West-end cabinet-maker refuses, most properly, to receive a sofa stuffed in a small-pox workshop; and the distress is something far beyond the conception of the outside world.

But to the costliness and sheer impossibility of providing hospital accommodation in face of a general epidemic, we are bound to add the danger of removal. We are glad to hear that special cabs have been employed; but it is a farce to dignify them by the name of ambulances. Although it may be owing to the deficiency in the mode of conveyance, still there have been too many deaths on admission to justify removal to a distance on a more extended scale. It is a significant fact that no such immediate mortality has followed the removal of patients to the local hospitals. At Shoreditch there has not been a single death before the third day after admission; and the same may be said of Paddington and Marylebone. It is certain that small-pox patients do not bear removal; and it should be imperatively ordered that the ambulances should afford the patients the opportunity of lying down.

Lastly, contrast this complicated machinery for treating an epidemic with the simple but perfect system of stamping out small-pox by means of vaccination and revaccination. At St. George's Hospital and at Middlesex Hospital every inmate was vaccinated, and small-pox disappeared. And it seems to us ten times more necessary to take the precaution in a densely-crowded room or populated court. Complicated systems of isolation and disinfection are, at best, but palliatives in face of a contagious disease which it defies our skill to trace? It will remain for the Committee of the House of Commons to ensure for the poor a remedy which, if it does not destroy the contagion, renders it perfectly harmless.

A RECENT annotation under the heading "Doing the Doctors," the materials and title of which we derived from the *Liverpool Daily Courier*, has produced from that paper an elaborate leader on the subject of "Co-operation in Doctoring." The *Courier* seeks to show that the Preston experiment has been eminently successful, and commends it to the "serious attention of the public"; while it is especially wroth at our having ventured to suggest that possibly

it may not be the doctors who have been "done," after all. The question is one of real practical interest in some regards. The *Courier* is mistaken in supposing that it greatly concerns the profession; but it is of vast importance to all classes of the public.

Attendance on working men and their families is a task thrown upon the medical profession almost as a difficulty to be overcome. It is seldom remunerative; because a practice mainly of this class involves small returns for great labour, and a very large proportion of bad debts; while a large club practice, although it substitutes a small fixed payment for a small uncertain one, labours also under various disadvantages. There are towns in which it is an absolute barrier in the way of obtaining a better class of patients; so that to say of Mr. A or Mr. B that he will "take clubs" is tantamount to saying that he has not won the confidence of his more wealthy neighbours. In such places, many struggling practitioners decline clubs on this plea, even although the small margin of profit out of the stipend might be welcome to them, because they are unwilling to create an obstacle to their own further advancement. To a young man, who has not yet settled in practice, the charge of a large club, in a town in which he does not intend to remain, is often attractive. It promises a living and experience; and it may fulfil the latter promise so far as to afford opportunities for seeing a great many natural labours. But as regards experience of medicine and surgery the results are seldom satisfactory. The young practitioner has usually too many sick to attend, at cost of much bodily fatigue, to have leisure or mental energy to study carefully the cases of individuals; and, in order to make a living, he is compelled to refrain from the employment of expensive medicines as much as possible. His question for solution becomes, not whether such medicines will do good, but whether they can be done without. His clients can judge only of two things—personal acceptability and regularity of visits. The latter is a question of routine; the former is easily to be secured by complaisance, or by submission to unreasonable demands. The means of nursing are apt to be deficient, and the character of the attendance is apt to become perfunctory. Under such a system, the cases in which careful examination and early treatment might ward off organic disease, or in which judicious medication saves life in acute illness, may easily be permitted to go their way unchecked. The doctor becomes overdone by physical exertion; his skill and knowledge are utterly unappreciated by the people among whom he lives, and he can hardly avoid suffering in tone of mind and in professional aptitude; his hand becomes tempered to what it works in. On this ground, therefore, on account of the effect which it is likely to have on the skill, efficiency, and actual worth of the practitioner who undertakes it, we think the system of a huge club union is essentially a mistake.

We have before us while we write a document that has been for some time in our possession, and that curiously illustrates the foregoing remarks. It is the prescription-paper of a working man who was a subscriber to some three-halfpenny dispensary, at which a dispenser was kept, and where drugs were a first charge on the funds. The poor man came under treatment in the middle of December, and died (of phthisis) on the 25th of September following. In December he received pills of blue-pill and rhubarb, to be taken every other night, a mixture containing iron and ether, and a turpentine liniment. He continued this treatment until April, when the mixture was changed to one of infusion of quassia, with spirit of ammonia, and tincture of bark. In May he returned to the original mixture; and in June this was replaced by one containing sulphate of iron and sulphate of magnesia, the mercurial pills being repeated frequently, but at irregular intervals. On the 15th of September the rhubarb in the pills was replaced by colocynth; and on the 22nd he received a final dose of five grains of calomel and half a drachm of jalap! Three days later, the curtain fell. This poor man, under a system not unlike that at Preston, had been "treated" by nothing but coarse cheap tonics and mercurial purgatives! He was visited often, and doubtless he and his friends were content.

If we look at a different class of practice—that, namely, in which clubs form but a small portion,—we are quite sure that inadequate payments are equally a mistake. A surgeon in general practice, in a town and country district, almost always has a few clubs. To put a case, let us suppose that his net profits amount to £500 a year, and that £50 of this is derived from clubs. This £50 will represent as much work as any other £200; and, making a fair calculation of the effects of wear and tear upon length of life, it may be questioned whether the doctor would not do better for himself and his family to be content with £450, and to leave clubs alone. If this be so, it is surely sound policy in his clubs to pay him the extra two or three shillings a year which would make him feel that they were striving to act honestly by him, and which would secure *cordiality* of service on his part. As a matter of fact, most clubs waste more money in adulterated beer than would pay this difference three times over. They get inferior men to engage to attend them on impossible terms, or they obtain, as a piece of undeserved luck, the services of some superior man who pities their ignorance; and then, in either case, they plume themselves upon their sagacity, and fancy they can obtain money's worth without a money equivalent. In this world everything fetches its value; and cheap doctoring is only attainable when there is a sufficient reason for its cheapness.

The Times must be the sole judge of the use it should make of its influence, and of the manner in which it should represent the technical questions that become the subjects of Government Bills. But the readers of *The Times*, even the most respectful of them, must be surprised and dissatisfied when they see how a leader on a Government measure is at one time resolved into a mere paraphrase of the measure, containing no word of independent criticism; and how, at another time, as in the instance upon which we are about to comment, our contemporary suffers its columns to be used as a medium of very serious misrepresentation. The leader of Wednesday on the propriety of pushing through Parliament the Government Medical Bill

of last session, and on the nature of the opposition that was made to it, appears to us to be an example of reckless misstatement, admitted, we fear, under the pressure of some private influence. *The Times* undertakes to explain why the Government Bill of last year failed. The explanation is to this effect: A certain party in the profession wishes to transform the Council from a judicial and regulative body into a sort of medical parliament, elected by a kind of general suffrage; and to entrust this parliament with the duties of suppressing quackery, regulating the etiquette and the fees of the profession, and prescribing in some respects its relation to the public. We challenge *The Times* to justify this statement by even a single utterance from any person or journal entitled to be considered as representing any section of the profession. Neither in the memorial which was signed by nearly ten thousand practitioners, nor in the Medical Bill of THE LANCET, nor even in that foreshadowed by the British Medical Association, are such objects hinted at. In regard to quackery, the ten thousand memorialists asked nothing but that the law should more strictly prohibit the false use of medical titles, so that the public might not be deceived. In our own Bill, we have adopted the clause of the Government Bill in regard to false titles and all the judicial work of the Council.

The complaint of the profession against the Bill of last year was that it left the work of regulating the education and examination of students in the hands of the old Medical Council, made, up to the extent of three-fourths, of the corporations which are pecuniarily interested in the matter. Medical men wanted the Council to be so changed in composition as to place it above suspicion. And the complaint came not from "a certain party in the profession," but from all classes of the profession — from leading consulting practitioners, as well as from the rank and file in England, Ireland, and Scotland. There was absolutely no talk on the subject at all in the House of Commons; for the Ministers never brought the Bill to a second reading, knowing full well that members of the House of Commons were most explicitly instructed to oppose the Bill. Since then dissatisfaction with the Bill has grown exceedingly, and without some treachery in the profession we could not conceive it passing in its present shape. "Such proposals" as *The Times* speaks of would not, indeed, bear a moment's discussion; but we never heard of such proposals, and do not believe that they have been made. It will be well for the public and the profession when *The Times* perceives the nature of the questions at issue in this matter, and when it helps us to obtain a perfectly disinterested Medical Council and a system of medical examination which will really test the competence of medical students. So slightly does the Government trust our existing examining boards that it has instituted special boards for the examination of all candidates for the public services. And if *The Times* will support THE LANCET Bill, that will be done for her Majesty's subjects which is already done for her servants. If *The Times* is too much under official inspiration for this, at least let it not misrepresent the views of a whole profession. Our contemporary seems to revel in the prospect of seeing more responsibility thrown on the Privy Council. In our opinion it has too much to do already; and with epidemics of old-fashioned severity, and with gross ignorance to be grappled with by its Education Act, it had better leave the technical subject of medical education to a Medical Council. But the present Medical Council cannot, in the nature of things, act either efficiently or disinterestedly.

Medical Annotations.

"Ne quid nimis."

THE SUPPLY OF VACCINE LYMPH IN LONDON.

GENERAL PRACTITIONERS are complaining in all directions of the difficulty in obtaining a sufficient supply of vaccine lymph. The demand for revaccination is growing daily. A case of small-pox occurred amongst the *employés* of a factory, and the medical attendant was sent for to vaccinate over eighty workmen. He applied to the public vaccinator of his district, and obtained two points; and to one in the next union, where he obtained permission to scramble amongst some half-dozen other applicants. He then secured a few tubes. He next visited a Privy Council station, and found that an order had been issued forbidding the vaccinator to give up children, or to supply more than a few points; and it was only after a search of several days that he obtained a healthy and well-vaccinated child. All this time, we are in a position to say, vaccine lymph is allowed to run to waste in immense quantities. The matter is really urgent, and there should be no difficulty in the Privy Council being able to announce their readiness to supply every legitimate demand. In the meantime, medical practitioners may obtain, at No. 8, Whitehall-place, a list of the district public vaccinators, and of the district vaccination stations, with the hours of attendance. This will enable them to visit the places where lymph can most readily be found; but they will have to remember that they have no legal claim upon the time and resources of the public vaccinators, and they should be careful not to interfere more than is absolutely necessary with the conduct of the business. It is a great misfortune that many of the stations are much too small to accommodate the crowds now attending them, a circumstance which makes the taking of lymph very difficult.

THE ADULTERATION OF FOOD.

THE coming Parliament promises to bring with it a full proportion of meritorious attempts at legislation; only too likely, alas! to be swamped again, as they have been swamped aforetime, by the billows of selfish and unmeaning party strife. Among others, we may mention an Act to prevent the adulteration of food and drugs; which will be reintroduced by Mr. Muntz. The indefatigable Mr. Postgate has supplied Mr. Muntz with fresh evidence; and quite recently the honourable member was present at a series of analyses which Mr. Postgate conducted, a full account of which has been given in the local papers. The substances examined were respectively called "coffee," "sherry," "sulphur," "peppermint lozenges," and "castor oil in capsules." The "coffee" was adulterated with chicory, roasted wheat, beans, mangold-wurzel, carrots, sawdust, and venetian red. The "sherry," at the prices of 54*s.*, 63*s.*, and 72*s.* per dozen, was in each case found to contain sulphuric acid; and, in one of the samples, in such quantity as to carbonise the residue left after evaporation.

The "sulphur" contained from 50 to 92 per cent. of sulphate of lime; the "peppermint lozenges" 40 per cent. of white earth; and the capsules a mixture of croton and common oil. It would be quite possible, we imagine, to turn over a new page in this history of fraud by inquiring with what substances the adulterating agents had been themselves adulterated. Mr. Babbage, if we mistake not, relates an instance in which the consumers of cheese were poisoned by red lead, that had been used to give a fictitious colour to annatto.

Of these analyses, made in Mr. Muntz's presence, perhaps the most important is that of the "sherry." It probably accounts for the severe gastralgia often produced by the horrible liquids that are retailed under this name, and at sixpence a glass, in many hotels and railway refreshment rooms. Notwithstanding Mr. Bright, and all the interests of free trade and competition, we cannot think it is for the good of society that the million should be compelled to take dilute sulphuric acid as a common drink.

THE INCREASE OF INSANITY.

THE question whether insanity is or is not increasing in this country more rapidly than the growth of the population would account for, is so important, and so generally interesting withal, that the fact of the current number of the *Journal of Mental Science* containing a paper by Dr. Lockhart Robertson, in continuation of former papers by him on this subject, will no doubt prove to many a special attraction. In January, 1869, Dr. Robertson brought before the Medico-Psychological Association the results of an inquiry into the alleged increase of lunacy, giving it as his opinion, based on the latest available data, that although the statistics of pauper insanity showed a progressive increase, that increase was in a yearly decreasing ratio, and that the popular idea of a rapidly-growing tendency to insanity in this country was fallacious. These statements of Dr. Robertson have instigated a good deal of discussion, and some adverse criticism from competent writers, in various scientific publications. The opposing evidence he has now brought together in a compact form, so as to aid in the further ventilation of the unsolved problem which he thus submits to the study and investigation of the Medico-Psychological Association. There are many difficulties in the way of a perfect demonstration of the issue. One of these is what a critic of Dr. Robertson aptly calls "an unknown quantity"—namely, the numbers of insane at large and unregistered. It is satisfactory to know that we in England are at length about to overcome this difficulty, inasmuch as at the Census, in April next, an account is to be taken of all the insane then existing among the population. True, this information will be chiefly valuable as a starting-point for future comparison; but the fact that we have no trustworthy means of measuring progress as between the past and the present disposes us to be thankful that such means will not be wanting in the future. If they have not yet done so, we would suggest to the Council of the Medico-Psychological Association that they should put themselves in communication with the Census authorities, with a view to make the return of insane as accurate as possible. The Census Act requires that all who are "imbecile or lunatic" shall be distinguished in the enumeration; but what ought to be ascertained (and promptly, if any good is to come of it) is whether any special instructions have been or are to be issued to the enumeration officers in respect of what will be a novelty to them. The distinction between congenital and acquired mental disease is hardly likely to be satisfactorily drawn by intuition alone.

There are some points in Dr. Robertson's paper which we should have liked to discuss had space permitted; as, for instance, where he says that "the whole question of the alleged increase of lunacy is to be solved by the ratio of the asylum admissions." If the asylums took all the insane population into charge we could understand that this would be so; but as there is an "unknown quantity" outside the asylums, the assertion seems to us rather a bold one. But, difference of opinion apart, everyone must feel indebted to Dr. Robertson for his thoughtful and valuable contributions to the study of the subject.

DR. LIVINGSTONE.

THE Royal Geographical Society held its meeting on Monday night in the great hall of the University of London, under the presidency of Sir Henry Rawlinson. From a letter received at the Foreign Office from Mr. Churchill, the English political agent at Zanzibar, under date Nov. 18th, 1870, Sir Henry read passages to the effect that, notwithstanding the delays inevitable in those regions, Mr. Churchill had succeeded in sending to Dr. Livingstone a reinforcement of seven men, who have engaged to serve the Doctor as porters, boatmen, and such like, together with a quantity of beads, clothes, and provisions for his use. These, Mr. Churchill hopes, will reach Ujiji in February; but at what precise date cannot be affirmed with confidence. Mr. Churchill, referring to the news already received by Dr. Kirk of the arrival at Unanyembe of men and supplies sent up in October, 1869, from Zanzibar, says that seven of these men had died of cholera, and that the survivors, having consumed the provisions forwarded for them, had acted on the advice of the Governor of Unanyembe, and drawn upon the supplies of which they were the bearers. According to the latest accounts from the interior, the Doctor, though heard of at Manimes, had not returned to Ujiji. In Sir Henry Rawlinson's opinion, Dr. Livingstone, if enabled to reach Zanzibar in February, might be looked for in England before the end of the current session, when (adds Sir Henry, expressing a hope which none echo more cordially than our own profession) an opportunity of welcoming the great missionary explorer will be enjoyed by the various metropolitan societies ere the close of June.

CORONER'S INQUIRIES INTO DEATHS FROM SMALL-POX.

DR. LANKESTER deserves the thanks of the public for the valuable inquests he is holding on persons who have died of small-pox. The cases are mostly those of unvaccinated children, and the evidence given lucidly illustrates the defects of our vaccination system, and the nature of the difficulties and prejudices that have to be overcome before we can rejoice over a thoroughly vaccinated community. The last two inquests held in Islington, on two children, respectively four and nine years old, are in point. The mother of one said that all her children were born in Devonshire, and were unvaccinated in consequence of the father objecting to vaccination. The father being now dead, and one of the children having fallen a victim to his folly, the rest were all vaccinated. But she did not seek for vaccination till one of them was really infected with the disease. Then she applied to a medical practitioner, Mr. Morgan, to have them all vaccinated. He, of course, referred her to the public vaccinator. Mr. Morgan, who attended the case of small-pox, said he had had nineteen cases of small-pox, but the present was the only unvaccinated case he had seen, and the only fatal one. The Inspector of Vaccinations explained that, as the child had been born in Devonshire, and was over four years old, he had no clue to the child, or to the fact that it was not vaccinated.

In the other case Dr. Ducat gave evidence, and, at the request of the Coroner, read a very pertinent letter which

he had addressed to Mr. Simon on the awkward and painful position in which Poor-law medical officers are placed at the present time when called in to attend parish cases of small-pox where there are unvaccinated children in the family, or persons urgently needing revaccination. A private practitioner in such circumstances would immediately vaccinate and revaccinate. But the absurd arrangements at present in force require the Poor-law medical officer to refer the unvaccinated and adults needing revaccination to the public vaccinator at a public station, by which arrangement time is lost, and the small-pox gets the start of the vaccination. In this case Dr. Ducat referred the widow to the public vaccinator for the vaccination of her two other children. She did not go, for the obvious reason that she could not leave her child dying of small-pox, and Dr. Ducat humanely vaccinated the two other unvaccinated children. Really it is monstrous that three precious days should first be lost, and then that the parish medical attendant should have to do this duty gratuitously and irregularly. Mr. Simon has not yet answered Dr. Ducat's letter, which delay we attribute, not to any discourtesy, but to the very serious nature of the questions which it propounds. But the case is urgent, and we hope Mr. Simon will give his advice to the Poor-law Board and to all guardians to empower their medical officers immediately to revaccinate all persons in families in which they are called to attend to small-pox cases. We trust Dr. Lankester will continue his valuable series of inquests.

THE CLINICAL SOCIETY.

THE apathy exhibited at the last meeting of this Society was as marked as the activity which prevailed in the discussions that took place on the 27th ult. The collective energy of all scientific societies will of course ebb and flow. But when subjects of such general interest as anasarca, chorea, and the like are brought forward, as to which most members must have had some experience, it is unsatisfactory to have the comments of a small minority only, divided by long intervals of deep and dreary silence. Young societies do better in erring on the side of loquacity rather than of taciturnity, and may fairly receive both wheat and chaff, being well assured that time and the current of truth will soon separate the one from the other.

WOUNDS PRODUCED BY THE NEEDLE-GUN AND CHASSEPOT BULLETS.

IN a late number of the *Deutsche Klinik* is a paper by Ewich on the effects of the French and German bullets, the principal points of which have been condensed by Pincus for the *Centralblatt*. The needle-gun bullet makes a wide wound, from which pus escapes easily, and the orifices of entrance and exit do not present any strongly marked difference. The wound produced by the entrance of the chassepôt bullet is very small, and at first sight may even be mistaken for a mere bruise; the exit orifice of the ball, however, is large and ragged. Seton-like wounds of the thorax occur frequently with both kinds of balls, and in either case are productive of but slight pain or suppuration. Wounds of the soft parts of the limbs are followed by profuse suppuration. The centre of gravity of the chassepôt bullet is situated more anteriorly, that of the needle-gun more posteriorly; the former, therefore, when propelled with moderate velocity, shatters the tubular bone it may happen to strike, and then glances aside; whilst the latter has this effect only when fired point-blank; at greater distances it is easily deflected or flattened out. This last condition, which is of frequent occurrence, has led to the supposition that a softer kind of lead is employed in the manufacture. In 1866, Büttner and Gleisberg found in 100 wounds caused by needle-gun bullets, 58 fractures of bone, and 42 flesh rents. The proportion of the latter in wounds produced by the chassepôt bullet is far larger.

The chassepôt bullet is a small cylinder, slightly rounded off into a cone at one end. The diameter of the circular base is from 11·6 to 12 millimetres; it is 25 mm. (1 inch) in length. The posterior third presents a circular elevation 3·5 mm. in height. The weight is 24·8 grammes.

The needle-gun bullet is of an elongated oval form, with flat base, having a diameter of 7·5 mm., the length is 27·3 mm. Between the posterior and middle third the diameter is 12 mm., between the middle and anterior, where it is thickest, 13·6 to 14 mm. The ball weighs 32 grammes (gramme = 15·44 grains).

The Bavarian needle-gun bullet weighs 28 grammes. It is conical anteriorly, cylindrical posteriorly. Its length is 21·5 mm. Its base is 14 mm. in diameter, and presents a conical inflection that extends to the middle of the length of the bullet, and which causes the centre of gravity to be translated forwards.

The mitrailleuse bullet has the same form as that of the chassepôt gun, but is 40 mm. in length, its base being 13 mm. in diameter. From the base to the middle it is perfectly cylindrical, from thence it narrows to the anterior fourth, where it is 12·5 mm. in diameter, and then becomes conical. The posterior fourth has two annular grooves 1·5 mm. broad, and 1 mm. deep. Its centre of gravity is in the posterior half. Its weight is 50·2 grammes. The specific gravity of all these forms of bullets seems to be as nearly as possible that of pure lead, 11·3.

FREE TRADE IN DRINKS.

WHATEVER benefits may have resulted from the abolition of the Corn Laws, it cannot be said that free trade in drinks has proved anything but a curse. The Marquis of Westminster, in moving the address on her Majesty's speech, said it had been tried at Liverpool for five years with the most disastrous effects. He believed, and we agree with him, that some degree of restraint would be productive of good. The number of persons arrested annually as drunk and disorderly amounted, it was stated, to 1 in 180 of the population; the value of the alcoholic liquors consumed in the United Kingdom amounted to the enormous sum of £88,000,000 per annum; and there was a house licensed for the sale of beer or spirits for every forty-five males in the United Kingdom. The subject is one which vitally affects the well-being of the country, and we are sincerely glad that there is a prospect of something being done in the way of attempting to check the alarming extent of intemperance. We are bound to remark, at the same time, that many of the liquors sold in this country are villanous compounds, and that if the beverages supplied to the working classes were of a superior character, or if a taste could be developed among them for other liquors than beer and spirits, the amount of violent intemperance at any rate would be much diminished.

THE MORTALITY FROM SMALL-POX.

THE mortality from small-pox has again risen in the metropolis from 196 to 211 last week. In Liverpool there were 86 deaths, which is, proportionally to the population, more than double that of London. The Registrar-General observes that

"The mortality from small-pox varies with age. Thus in the last week the annual rate per 1000 in children under five years of age was 10·7; in young persons of five and under twenty it was 3·2; in persons of the age of twenty to forty it was 2·7; in men and women of forty to sixty it was

0·8; and after sixty the rate was nominal. This has an important bearing on the question, Does the protective power of vaccination wear out with time? The persons who die in 1871 at the age of twenty to forty must have been born about the years 1831-51; while those who die at the age of forty to sixty must have been born about 1811-31. Now it is not likely that the numbers born in 1811-31 were vaccinated in any larger proportion than those born twenty years later; the balance is probably on the other side; yet the mortality at the advanced ages of forty to sixty was only one-third of the mortality at the ages of twenty to forty. The danger of dying from small-pox diminishes rapidly as age advances, which could not be the case if the effect of vaccination wore out with time. The facts of the ten years 1851-60 over all England bear out this deduction."

Whilst admitting the facts, we are inclined to doubt the inference in favour of the permanence of the protective power of vaccination. In contrasting the susceptibility of persons between the ages of twenty and forty and of those between forty and sixty, it is necessary to remark that more of the latter will have suffered from small-pox. It is also probable that the susceptibility to contagion diminishes with age. Moreover, there are important facts in our Vaccination Report which tend to show that the greatest susceptibility, even amongst vaccinated persons, is between the ages of ten and twenty. The matter, however, is of less consequence because we can insure immunity by re-vaccination.

ULTIMATE DISTRIBUTION OF THE NERVES IN THE TAIL OF THE TADPOLE.

IN a recent essay published by Dr. E. Klein in the Reports of the meetings of the Academy of Vienna, he gives the results of his observations on this delicate point of minute anatomy, which essentially corroborate the views of Dr. Beale showing that the ultimate terminations of the nerves form loops. Dr. Klein describes the principal nerve trunks as undergoing subdivision, till at length there are only anastomosing non-medullated fibres, which, however, exhibit clearly the fibrillar structure of axis cylinders. From this web, fine pale fibres proceed, which form a second plexus beneath the sub-epithelial hyaline layer. At tolerably regular distances these fibres exhibit fusiform swellings, each with nucleus and nucleolus (bipolar ganglion cells). From this, again, the finest branches are given off, which form a plexus immediately beneath the epithelium, and amongst them are distributed bodies that appear to be multipolar ganglion cells. Dr. Klein was unable to observe any communication between the fibres of the finest sub-epithelial plexus and the epithelium, or any other of the tissues of the tail of the tadpole.

SANITARY STREET-WATERING.

IN the course of last autumn, when noticing Mr. Cooper's ingenious proposal to water the streets of London with a solution of deliquescent chlorides, so that rapid drying might be prevented, and ammoniacal decomposition checked, we expressed curiosity with regard to the quantity of chloride of aluminium or other salt that would be needed in order to arrest the putrefaction of the average amount of horse-droppings left in our great thoroughfares. We have now been informed, on the joint authority of Mr. Cooper and Professor Wanklyn, that, in a street of great traffic, such as Parliament-street, where it is calculated that 9276 vehicles pass every day, the average daily deposit of horse-dung amounts to 400 lb. over an area of one thousand square yards. To deodorise this quantity, 40 lb. of mixed chloride of sodium and calcium would be required; but the addition of 5 per cent. of chloride of aluminium to this mixture increases its activity by 20 per cent., and renders 32 lb. of the triple compound sufficient. It is manifest that this small quantity can be used without the least difficulty; and hence that the problem how to deodorise the streets, and to get rid of ammoniacal dust, may be said to be practically solved. In Westminster the experiments with Mr. Cooper's solution have been so successful that the Board of Works awarded to him an additional payment of £100 as an evidence of their complete satisfaction; and we are glad to learn that the authorities of other parishes also are adopting the plan, or are making preliminary inquiries with regard to it. It can hardly be doubted that the general use of the solution would tend to destroy a considerable proportion of the germs or carriers of infectious diseases. These carriers, whatever their nature, must often rest for a time on the surface of London streets; and there can be little question that the mixed chlorides would destroy their activity. It is an important matter that Mr. Cooper's solution is in itself quite harmless to animal life, and hence that no accident can result from its employment.

THE MEDICAL OFFICER OF RUGBY SCHOOL.

THE resignation of Dr. Farquharson, the medical officer of Rugby school, adds another to the numerous changes which have recently been made in the official staff. We have not a very high confidence in the sanitary arrangements of this ancient seat of education, particularly since the refusal of Dr. Hayman to permit our Commissioner to inspect and report upon them. Dr. Farquharson was a pupil in the best sanitary school the country now possesses—viz., the army; and the reception of our Commissioner by him last year enables us to speak in the highest terms of his ability and judgment. His resignation must be regarded by the parents of the boys as an almost irreparable loss.

THE MURPHY ANNUITY FUND.

OUR attention has been specially called to an attempt which is now being made to succour a well-known and talented member of the profession, who from repeated misfortune and infirm health has been brought face to face with serious distress. Reference is made to Dr. Edward Murphy, late Professor of Midwifery at University College. Several of those who know this gentleman well have agreed to attempt the raising of a sufficient sum of money to purchase a small annuity for the remainder of his days, so as to secure him a fairly comfortable subsistence, to which he is at present a stranger. Dr. Murphy is now sixty-eight years old, and quite unfit to follow professional or other avocation. Amongst those who have given their names as contributors to the projected fund are:—Dr. Arthur Farre, Dr. Russell Reynolds, Mr. Erasmus Wilson, Mr. Burford Norman, and others.

It is scarcely necessary that we should add the expression of our sympathy with the proposal now made to befriend a professional brother who in his day has done not a little to advance medical science, and to secure him against the climax of a life of ill luck, and the want of daily bread in the eventide of life.

DRAINAGE OF RICHMOND.

AFTER an investigation extending over many days, the Government Commissioner, Mr. Harrison, has expressed his intention to report against the proposal to take the Richmond sewage to the farm at Malden. The commissioner did not express any opinion on the merits of sewage irrigation, and seems to have founded his judgment on the evidence given as to the unsuitableness of the site.

SIR HENRY STORKS.

"THE Contagious Diseases Interest," as it may now be called, sustained a signal defeat in the return of Sir Henry Storks for Ripon on Wednesday. The rival candidate, to make sure of success, gave in a facile adhesion to the cause which had already kept Sir Henry out of Colchester, and came up to the poll (to put it figuratively)

"Contaminato cum grege turpium
Morbo virorum."

But all in vain. Common sense prevailed. Sir Henry had a majority of 220; and, although his return to Parliament may not save the Contagious Diseases Acts, still his influence will be exerted to postpone their repeal, if not to bring them up again in a modified shape for the protection of those services whose efficiency Sir Henry has laboured so long to promote.

THE ROYAL SANITARY COMMISSION.

THE reply of Mr. Bruce to Sir Charles Adderley's inquiry on Monday evening may be taken as conclusive of the fact that the results of the Royal Sanitary Commission's labours will be brought before Parliament for legislation early this session. Mr. Bruce's tribute to the exertions of the Commission was well deserved, but better than thanks, however graciously conveyed, will be to the Commissioners a Bill promptly produced and comprehensive enough to satisfy them that their painstaking has been well bestowed.

FEMALE MEDICAL STUDENTS.

THE champions of the medical education of women must, by this time, be getting accustomed to that deferment of hope which "maketh the heart sick." On Monday, the Managers of the Royal Infirmary were waited upon by a deputation appointed at the recent meeting held to promote the education of females in medicine, for the purpose of explaining its object. After some conversation, the matter was postponed till Monday next. The managers had also before them a report of the committee appointed to tax the votes given at the meeting at which the claims of female students to admission into the wards were discussed. The report showed that the majority in favour of leaving the matter in the hands of the managers was greater than was announced at the meeting.

THE SOUTH-WESTERN PROVIDENT DISPENSARY.

AN attempt is being made to eject this excellent and useful dispensary, one of the few which are established on the provident principle, from the premises at 41, Denbigh-street, Pimlico, on the ground that the covenants of the lease are infringed by using a private dwelling-house for such a public purpose. We regret to find that Dr. Burton Payne, surgeon, is the chief instigator, and that he is so on the ground that a public charity lowers the respectability of the neighbourhood. We should have thought that no one need be ashamed of the proximity of such an excellent institution, and that the air of Denbigh-street is as little likely to suffer from the presence of a provident dispensary as that of Grosvenor-place from its contiguity to St. George's Hospital.

Happily the matter must eventually be referred to the Marquis of Westminster, and we have the most entire confidence that he will not listen to such an unworthy demand.

THE Birmingham Board of Guardians are, for them, most unusually alert; and have actually given orders that any who wish to be revaccinated may have the operation done free of cost by their medical officer.

THE Senate of the University of London are in treaty for the purchase of a site of land in Battersea-fields, for the sum of £1200, for the purposes of the Brown Trust, and upon which to erect a suitable Animal Sanitary Institution. The piece of land in question is about four-fifths of an acre, and is in the possession of the London, Chatham, and Dover Railway Company. A sum of £2000 has been generously given by Mr. Cunliffe, of Lombard-street, for securing the site and the erection of buildings and premises for the intended institution. The capital stock of the Brown Trust amounts at the present time to £33,310 3s. 7d. three per cent. consols.

ON Saturday, the 11th inst., a deputation from the Managers of the Edinburgh Royal Infirmary waited on the Senatus Academicus, with a view to obtain a settlement of the price to be paid by the University for the infirmary site. The Lord Provost and other members of the deputation were heard at some length, but no definite action was decided upon. On an early day the Senatus will hold another meeting to come to a final decision as to the sum to be paid for the infirmary.

IT may be well to remind intending candidates for the Army and Navy Medical Services that they will have to appear at the University of London, in Burlington-gardens, at 10 A.M., on Monday, the 20th instant. There are thirty-six vacancies for the Army Medical Department, and the candidates for that service much exceed in number those for the naval service.

ON Wednesday evening, the 8th instant, the attendants of Bethnall House Asylum, London, took the opportunity of presenting a handsomely chased silver cup, with an appropriate inscription, to Mr. Charles Davidson, M.R.C.S., as a mark of respect on the occasion of his resigning the appointment of resident medical officer which he has held in that institution for nearly seven years.

THE Right Honourable John Bright (says our Birmingham correspondent) is so far recovered that he will be able on an early day to resume his Parliamentary duties. In accordance with this expectation, it has been unanimously resolved at a meeting of his supporters to decline his proffered resignation.

THE Board of Guardians of the Bedford Union have given Mr. G. N. Swinson, of Turvey, near Bedford, a gratuity of £5, in addition to his salary, as compensation for extra labours and services to the poor last year during the prevalence of typhoid fever in one of the parishes of Mr. Swinson's district.

MR. W. H. SMITH, M.P., has given notice of his intention to call the attention of the House of Commons, on the 14th of March, to the operation of the Poor Law within the metropolis, and to move an address for a Royal Commission to inquire into the policy and administration of the law.

MR. MUNTZ, Viscount Sandon, and Mr. Wheelhouse have brought in a Bill to exempt charities and hospitals from local rates. The proposed enactment is to come into force from and after the 1st September, 1871, but is not to extend to Ireland.

THE scholars of Westminster School have been vaccinated *en masse*, in consequence of the excessive prevalence of small-pox in Westminster.

DR. SKODA has been succeeded in the Chair of Medicine by Professor Dūchek in the University of Vienna.

MEDICAL ACT (1858) AMENDMENT BILL.

[Proposed by THE LANCET.]

A BILL

INTITULED

AN ACT TO AMEND THE LAW RELATING TO THE QUALIFICATION, EDUCATION, AND REGISTRATION OF PRACTITIONERS IN MEDICINE AND SURGERY.

WHEREAS it is expedient to amend the law relating to the Qualification, Education, and Registration of Practitioners in Medicine and Surgery,—

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows:—

PRELIMINARY.

1. *Short Title and Construction.*—This Act shall be construed as one with the Medical Act 1858 (in this Act referred to as "the principal Act"), and with the Acts amending the same, as set forth in the first Schedule to this Act, and those Acts and this Act may be cited together as "The Medical Acts 1858 to 1871," and each of those Acts may be cited by the short title in the said Schedule mentioned, and this Act may be cited as "The Medical Act 1871."

2. *Definitions.*—In this Act, if not inconsistent with the context, the following terms shall have the meanings hereinafter assigned to them; that is to say:—"British possession" shall mean any colony, plantation, island, territory, or settlement within Her Majesty's dominions, and not within the United Kingdom. "The General Medical Council" shall mean the incorporated General Council of Medical Education and Registration of the United Kingdom as established by the principal and other Acts set forth in the first Schedule to this Act, and wherever in such Acts the words "the General Council" occur, they shall be read as "the General Medical Council." "The Medical Authorities" shall mean the Medical Authorities of the United Kingdom in England, Scotland, and Ireland respectively, as set forth in the second Schedule to this Act. "Fundamental Medical Sciences" shall mean Chemistry, Botany, Natural History, general Pharmacy, Anatomy, and Physiology. (*a*) "The chief Registrar" shall mean the Registrar appointed by the General Council under the provisions of the 10th Section of the principal Act. (*b*) "Medical Practitioner" shall mean a legally qualified medical practitioner as explained by the 34th Section of the principal Act.

GENERAL MEDICAL COUNCIL.

3. *Election of Council.*—The General Medical Council shall be elected once in every five years on the first Monday in February; and the first election under this Act shall be made on the fifth day of February, 1872; and every member of the Council shall from time to time be eligible for re-election.

4. *Retirement of present Council.*—On and after the fifth day of February, 1872, the present members of the General Council shall cease to hold office, but shall be eligible for appointment or election under this Act in manner hereinafter provided.

5. *Constitution of Council.*—The General Medical Council shall consist of a President and twelve Medical Practitioners; of whom four shall be appointed by Her Majesty, with the advice of her Privy Council—viz., two for England, one for Scotland, and one for Ireland. Four shall be elected in manner hereinafter provided by the Medical Practitioners of the United Kingdom—namely, two for England by the Medical Practitioners of England, one for Scotland by the Medical Practitioners of Scotland, and one for Ireland by the Medical Practitioners of Ireland. Four shall be elected in manner hereinafter provided by the Medical Authorities of the United Kingdom—viz., two for England by the Medical Authorities of England collectively, one for Scotland by the Medical Authorities of Scotland collectively, and one for Ireland by the Medical Authorities of Ireland collectively.

6. *Election of President.*—The Medical Practitioners so elected on the Council shall forthwith appoint a President, who may either be a member of their own body, or a Medical Practitioner, or otherwise as they may think fit; provided that if they appoint a member of their own body, then another Medical Practitioner shall be constituted a member of the Council in his place in manner herein provided in case of death or resignation.

7. *Resignation or Death of Member of Council.*—Any member of the General Medical Council may resign his appointment by letter addressed to the said Council; and, upon the death or resignation of any member of the said Council, some other person shall, on some day to be fixed by the Council, be constituted a member of the said Council in his place in manner herein provided, and that such other person shall hold office in the same manner and subject to the same conditions as his predecessor would have done.

8. *Notice of Day &c. of Election.*—Once in every week, for four consecutive weeks preceding any election of a member or members of the General Medical Council, the chief Registrar shall cause to be inserted in not less than two of the weekly medical journals, and also in *The Times* newspaper, a notice of the day fixed for such election, together with such other particulars in reference thereto as the General Medical Council for the time being may authorise: Provided that the last of such insertions shall not be less than four nor more than six weeks immediately preceding the date of such election.

9. *Mode of Election by Medical Practitioners.*—Every election of a member or members for the General Medical Council by the Medical Practitioners of the United Kingdom shall be conducted in manner following,—that is to say: As soon as may be after the insertion of the latter of such last-mentioned notices, but not less than fourteen days previous to the day therein named for such election, the chief Registrar shall cause to be forwarded by post to each medical practitioner resident in the United Kingdom and entitled to vote at such election a voting paper, setting forth the day of election, the number of persons to be elected, and the portion of the United Kingdom for which they are to be elected, and the name of every person who, being legally qualified, shall also have been duly nominated as a candidate for such election; and the voter shall affix his initials opposite the name of each of the candidates for whom he desires to vote, and shall sign such voting paper in the presence of a witness, who shall attest the same by writing thereon his name and address; and such voter shall transmit such voting paper, so filled up, signed, and witnessed, by post, prepaid, to the chief Registrar before the day named in such voting paper as the day of such election.

10. *Chief Registrar to certify to Privy Council names of persons elected by Medical Practitioners.*—The chief Registrar shall forthwith examine or cause to be examined all the voting papers received by him before twelve o'clock in the evening of the day appointed for such election, and shall reject all voting papers not duly signed and attested, or by which the voter has voted for a larger number of persons than he is entitled to vote for; and from the remaining voting papers the chief Registrar shall ascertain accurately the number of votes duly given for each of the respective

candidates named therein, and shall make and sign a return of the same, and upon such return shall certify the name, residence, and description of every person who has been duly elected as member of the General Medical Council for England, Ireland, and Scotland respectively; and shall within one week after the day of such election lodge such return with her Majesty's Privy Council; and every such person shall thereupon be considered to have been duly elected a member of the General Medical Council; and the chief Registrar once in each week for four consecutive weeks, and in the same medical papers in which the previous notices of the election had been inserted, shall insert the names of the persons so duly elected as aforesaid.

11. *Mode of Nominating Candidates for Election by Medical Practitioners.*—No candidate for election on the Council by the medical practitioners of the United Kingdom shall be considered as duly nominated unless he be a medical practitioner, nor unless the following requirements have been complied with:—1. The nomination shall be in writing, signed by not less than twenty medical practitioners. 2. The candidate shall on such nomination papers signify his intention to act on the Council if elected. 3. Such nomination shall be delivered to the chief Registrar at least thirty days prior to the day named for such election.

12. *Expenses of Election of General Medical Council; how defrayed.*—The expenses incurred by the Registrar in respect of any election of a member or members on the General Medical Council shall be defrayed out of the funds at the disposal of the Branch Councils of England, Scotland, and Ireland respectively, in such proportion as the General Medical Council may direct.

13. *Mode of Election by Medical Authorities.*—Within one month after the passing of this Act the chief Registrar shall give notice of the same to each of the Medical Authorities named in the Second Schedule to this Act; and on or before the first day of November, 1871, the Medical Authorities for England, Scotland, and Ireland respectively may and shall (subject to the provisions of this Act) decide upon the mode in which they shall elect a member or members of the General Medical Council, and also the mode in which and the person by whom the result of such election shall be certified to the chief Registrar; and such authorities shall respectively, within seven days after the said first day of November, communicate the same to the chief Registrar; and in the event of such Medical Authorities, or either of them, failing so to decide or to make such communication, it shall be lawful for the General Medical Council for the time being (but subject to the provisions of this Act) to decide upon the mode in which the Medical Authorities so failing shall elect and certify the election of such member or members; and, upon notice of such last-mentioned decision being given by the chief Registrar to such Medical Authorities, they shall adopt such mode of electing and certifying accordingly.

14. *Medical Authorities to elect and certify to chief Registrar, who shall report to Privy Council.*—When any such notices as aforesaid have been given of any election at which the Medical Authorities or either of them shall be entitled to vote, such Medical Authorities shall forthwith proceed respectively to the election of such member or members, and shall within one week after the day of such election duly certify in writing to the chief Registrar the name, residence, and description of every person so elected by them; and the chief Registrar shall, within three days after receiving such certificate, report the contents of the same to her Majesty's Privy Council, and every person therein named shall thereupon be considered to have been duly elected a member of the General Medical Council, and the chief Registrar shall give notice of the same in manner hereinbefore provided as to members elected by the Medical Practitioners.

15. *Provision in case of failure of Medical Authorities to elect or certify.*—In the event of either of the Medical Authorities for England, Scotland, or Ireland, failing to elect or failing to certify the election of a person duly qualified to be a member of the General Medical Council within the time mentioned and in accordance with the provisions of this Act, Her Majesty, acting under the advice of her Privy Council, shall proceed to appoint a member or members to represent such Medical Authorities.

16. *Branch Councils for England, Scotland, and Ireland.*—Those members of the General Medical Council who shall be appointed or elected for England, Scotland, or Ireland respectively, shall collectively be Branch Medical Councils for such parts of the United Kingdom respectively; and the General Medical Council may delegate to each such Branch Council such of its powers and duties as to the General Medical Council may seem fit; and the President for the time being shall be *ex officio* a member of each Branch Council.

17. *Meetings of General Medical Council.*—The General Medical Council shall hold their first meeting within one month after the day appointed for their election, and shall hold such other meetings from time to time as they may deem expedient; and the said Council may make general rules and regulations for carrying this Act into effect, which general rules and regulations shall remain in force until altered at any subsequent meeting. Provided always that it shall be lawful for the President at any time, if he see fit, to direct the chief Registrar to summon a special meeting of the said Council, at such time and place as to the President shall seem expedient, by letter addressed to each member, stating the object of such meeting; and at every meeting of the General Medical Council the President, or, in his absence, some other member to be chosen from the members present, shall preside; and all business to be transacted at any meeting of the said Council shall be decided by the votes of the majority of the members present at such meeting; but no business shall be transacted at any meeting beyond the act of adjourning the same unless at least eight members be present; and at all such meetings the President or other member presiding shall, in addition to his vote as a member of the Council, have a casting vote in case of an equality of votes.

18. *Executive Committee of General Council.*—The General Medical Council may appoint out of their own body not less than four persons, including the President, as an Executive Committee, of which the quorum shall not be less than three; and may delegate to such Committee such of the powers and duties vested in them as they may see fit other than the power of making rules and regulations, or of making representations to Her Majesty in Council, as hereinafter mentioned.

19. *Council may grant Licences to Practise.*—It shall be lawful for the General Medical Council, under their corporate seal, to grant a Licence to practise medicine and surgery in the United Kingdom to any person who shall have been duly certified to them by the Examiners under this Act to be appointed to have satisfactorily passed such medical examination as is hereinafter provided; and, subject to the provisions of this Act, it shall be lawful, after receiving such Licence, for such persons to practise medicine and surgery accordingly.

EXAMINERS AND INSPECTORS.

20. *Appointment of Board of Examiners.*—The General Medical Council shall constitute a Board to be called "The National Medical Examining Board," by appointing thereto from time to time, for any period not exceeding five years,

such number as they may think fit of persons of approved skill in the several subjects on which they are to examine, but such persons, after the expiration of the time for which they are so appointed, shall not be eligible for reappointment; and such Board or such members thereof as may from time to time be appointed for that purpose by the General Medical Council shall attend in England, Scotland, and Ireland respectively, and conduct the examination of all candidates for a Licence to practise under this Act.

21. *Half-yearly and Special Examinations.* — The first examination of candidates for a licence to practise under this Act shall be held in each division of the United Kingdom not later than the first day of August, 1872, and shall be continued at intervals of not less than once in every six months at such place and time as may be appointed by the General Medical Council; notice of which place and time shall be given by the chief Registrar once in each week for four consecutive weeks immediately preceding the date of such examination in not less than two of the weekly medical journals and also in *The Times* newspaper: Provided always that it shall be lawful for the General Medical Council or either of the Branch Councils at their discretion, and on the request of any such candidate, and subject to the payment of such extra fees as they may deem proper, specially to authorise any such candidate to be examined for such Licence at such time and place as may to them seem proper.

22. *Nature of Medical Examination.*—Every examination of a candidate for a Licence to practise shall embrace a full inquiry into the candidate's knowledge of the fundamental medical sciences, and into the theoretical knowledge possessed by him of Medicine, Surgery, and Midwifery, and more especially as to his practical knowledge (as tested at the bedside) of cases of disease in all these departments.

23. *Examiners to report to Council, and to grant Certificates to Candidates.*—It shall be the duty of the Examiners to make a report to the General Medical Council of the result of every examination attended by them, and they shall also give to every candidate who shall pass such examination to their satisfaction a certificate thereof under their hands.

24. *Chief Registrar to procure and deliver Licence after receiving Examiners' Certificate.*—Every candidate who shall have received from the Examiners a certificate of having passed a satisfactory examination as hereinbefore provided, shall forthwith present the same to the chief Registrar, and it shall be his duty to procure and deliver to the examinant a Licence to practise, duly sealed with the corporate seal of the General Medical Council.

25. *Preliminary Examinations.*—It shall be the duty of the General Medical Council to make such regulations for testing, by Preliminary Examination or otherwise, the proficiency in ordinary non-professional branches of education of candidates for examination for a Licence to practise under this Act.

26. *Provision for Examination of Persons partially Qualified.* —Where any person has obtained before the passing of this Act a qualification to practise in Medicine or in Surgery, or in some branch of Medicine or Surgery, but not in all the branches of Medicine and Surgery, the General Medical Council, or either of the Branch Councils, may, on the request of such person, specially authorise such person to be examined as a candidate for a Licence to practise under this Act, upon such terms and subject to such conditions as may to them seem proper.

27. *Remuneration of Examiners.* — The members of the National Medical Examining Board under this Act shall receive such remuneration for their labours as to the General Medical Council may seem fit.

28. *Appointment of Board of Inspectors of Medical Examinations.*—The General Council shall appoint not less than three or more than six persons who shall be called "The National Board of Inspectors of Medical Examinations"; and such Inspectors, or some one or more of them, shall from time to time attend every examination of the National Medical Examining Board, and report to the General Medical Council thereon; and such Inspectors shall so attend the said examinations as that neither of them shall attend two consecutive examinations in either part of the United Kingdom.

29. *Inspectors may attend Examinations by Medical Authorities.*—The Inspectors shall, at the request of the General Medical Council, attend the examinations of any of the Medical Authorities in the United Kingdom conferring degrees or diplomas, and such Medical Authorities are hereby required to allow such attendance; and it shall be the duty of such Inspectors to make such report thereon to the General Medical Council as the said Inspectors deem advisable.

30. *Remuneration of Inspectors.*—The Inspectors of Medical Examinations under this Act shall receive such remuneration for their duties as to the General Medical Council shall seem fit.

REGISTRATION, ETC.

31. *Persons licensed by General Council to be entered on Register.*—The chief Registrar shall forthwith register or cause to be registered under this Act in the General and Branch Registers the name of every person to whom a licence to practise shall have been granted in manner last mentioned; but no person shall be entitled to be registered under this Act unless and until he shall have obtained such licence.

32. *No Qualification to be granted to any Person not Registered.*—Within one week after the General Medical Council shall have fixed the date of the first examination in England, Scotland, and Ireland respectively, of candidates for a licence to practise under this Act, the chief Registrar shall give notice thereof to each of the Medical Authorities in that part of the United Kingdom, and after such date it shall not be lawful for either of such Medical Authorities to grant to any person whatsoever the title or qualification of Licentiate, nor shall it be lawful for either of such Authorities after such date to grant any other medical diploma, degree, or title to any person whatsoever who at the time of granting the same shall not be registered under this Act, or under the principal Act, or the Medical Act of 1868.

33. *Registration under principal Act to cease.*—After the date fixed by the General Council for the first examination of candidates under this Act, no person except those at the time of the said date registered or registerable under the Act of 1858, and those hereinafter mentioned, shall be registered under the principal Act by virtue of any qualification in that Act mentioned.

34. *Form of Register.*—All registration under this Act shall be in the form prescribed in the third Schedule of this Act.

35. *Limitation of Time for Registration under principal Act.*—Prior to the 1st of January, 187 , every person who at the date of the passing of this Act was qualified to be registered under the principal Act shall be entitled, upon application, to be so registered; but after the said 1st of January, 187 , no person, except as hereinafter mentioned, shall be registered under the principal Act by virtue of any qualification in that Act mentioned.

36. *Power to Erase or Alter Entries in Registers.*—With regard to the General Register of the United Kingdom, and the Branch Registers thereof, the following provisions shall take effect in addition to those prescribed by the principal and other Acts in the first Schedule to this Act mentioned:—(a) If, after any person is registered as a Licentiate in pursuance of this Act, any Medical Authority shall deprive

such person of any medical diploma, degree, or title granted to him by such Medical Authority, such Medical Authority shall forthwith certify the same to the chief Registrar, who shall forthwith erase or cause to be erased from the General Register and any Branch Register the diploma, degree, or title which may have been inserted therein, and of which such Licentiate has been so deprived. (*b*) Where, under the authority of the principal Act, the name of any person shall have been erased from any Register, the name of that person shall not be again registered in any Register except by direction of the General Medical Council, or by order of a Court of competent jurisdiction. (*c*) If the General Medical Council think fit in any case they may direct any Registrar to restore to his Register any name erased by him therefrom, and the Registrar shall restore the name accordingly. (*d*) If the name of any person has been erased from any Register at the request or with the consent of such person, such name may, by order of the General Medical Council, be restored to such Register on the application of such person, and on payment of such fee, not exceeding the amount for the time being of the fee for registration, as the General Medical Council may by such order determine. (*e*) Each Registrar shall from time to time insert in his Register any alteration which may come to his knowledge in the address or legal description of any person registered. (*f*) Where any medical practitioner shall have been, either before or after the date of his registration, convicted in any part of Her Majesty's dominions, or in any foreign country, of any offence which, if committed in England, would be a felony or misdemeanour, or if committed in Scotland would be a crime and offence, or shall, in the opinion of the General Medical Council, have been guilty of any infamous or disgraceful conduct in any professional respect, such medical practitioner shall be liable to have his name erased from the Register; and the General Medical Council may, and upon application of any of the Medical Authorities shall, cause inquiry to be made into the case of any person who is alleged to be liable to have his name erased under the provisions of this Section; and after notice to and hearing such person, if he shall desire to be heard, the General Medical Council, on proof of such conviction or infamous or disgraceful conduct, shall cause the name of such person to be erased from the Register: provided always that the name of no person shall be erased under this Section on the ground of his adopting any theory of medicine or surgery.

37. *Council may refuse to insert in Register, Diploma, &c., if obtained by insufficient Examination.*—If any or either of the Inspectors of Examinations appointed under this Act shall at any time report to the General Medical Council that, in their or his judgment, the course of study or examination required by either of the Medical Authorities as the condition for granting any medical diploma, degree, or title is insufficient, and implies a lower standard of medical knowledge than is required by the examination under this Act, it shall be the duty of the General Medical Council, if they consider such report well founded, to communicate with such Medical Authority requiring them to adopt a higher standard of study and examination; and it shall be lawful for the General Medical Council, with the consent of her Majesty's Privy Council, to refuse to insert in the Register any medical diploma, degree, or title granted by such Medical Authority, unless and until a higher standard of education or examination has been adopted by them to the satisfaction of the General Medical Council.

38. *Registration of Colonial or Foreign Practitioners under the principal Act.*—Where any person holds any medical diploma, degree, or title granted in any British possession or in any foreign country, and such person proves to the satisfaction of the General Medical Council that such diploma, degree, or title represents the like degree of knowledge, as tested by examination, to that which is required for obtaining a licence to practise under this Act, and entitles the holder thereof to practise Medicine and Surgery in such British possession or foreign country, then, if such person is more than forty years of age, and has practised Medicine and Surgery for not less than ten years out of the United Kingdom, or, in the case of persons practising in the United Kingdom at the time of the passing of this Act, for not less than ten years in the United Kingdom or elsewhere, it shall be lawful for the General Medical Council, on the application of such person, and upon reasonable proof of character, to direct such person to be registered under the principal Act without examination, upon payment of such fee, not exceeding the ordinary fee for registration, as the General Medical Council may deem proper.

39. *Special Registration of Colonial or Foreign Practitioners under the principal Act.*—Where the General Medical Council are satisfied of the eminent professional acquirements and character of any person who for more than ten years has practised Medicine or Surgery in any British possession or foreign country, they may by a special order direct such person to be registered under the principal Act, and such person shall be registered accordingly.

FEES.

40. *Fees for Examination and Registration.*—Fees to be paid under this Act may be from time to time fixed by the General Medical Council, provided that the fees for examination and registration shall not exceed respectively the sum of £5, and such fees shall be paid to the chief Registrar by every candidate for examination for the licence under this Act before he is admitted to such examination; but such registration fee shall be repaid to any unsuccessful candidate.

41. *Payment of Fees.*—The fees for examination and registration hereinbefore mentioned shall be paid to the treasurer of the Branch Medical Council within whose district the same shall have become payable, and shall be applied by him under the direction of such Branch Medical Council.

PENALTIES.

42. *Penalties for Unauthorised Assumption of Titles &c. by Unregistered Practitioners.*—If any person who for gain either practises Medicine or Surgery, or any branch of Medicine or Surgery, or is engaged in the cure or treatment of diseases or injuries, and is not registered under the principal Act, takes or uses any of the designations enumerated in Schedule A to the principal Act as amended by this Act or by any of the Acts in the first Schedule mentioned, or the designation of Licentiate in Medicine and Surgery, or Licentiate in Medicine or in Surgery, or in any branch of Medicine or Surgery, Professor of Medicine, Professor of Surgery, Physician, Surgeon, Doctor, Medical Practitioner, or any designation used to distinguish duly qualified practitioners of Medicine or Surgery, or any branch of Medicine or Surgery, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding £100: provided that a person shall not be liable to such penalty if he shows that he is not a British subject, and not ordinarily resident in the United Kingdom, and holds a medical diploma, degree, or title from some University, College, or body in any British possession or foreign country entitled to grant the same.

If any person who for gain either practises medicine or surgery, or is engaged in the cure or treatment of diseases or injuries, wilfully takes or uses any of the above-mentioned designations to which he is not entitled, he shall for every such offence be liable on summary conviction to a penalty not exceeding £20.

If any person not registered under the principal Act gives any certificate which under the principal Act is not valid

unless signed by a person registered under the principal Act, he shall be liable on summary conviction to a penalty not exceeding £20.

The General Medical Council and also any Branch Medical Council may take proceedings against any person for the contravention of this section; and no prosecution for the contravention of this section shall be instituted by any private person, except with the consent of the General Medical Council or some Branch Medical Council.

Nothing in this section shall prevent any person who lawfully holds a certificate of fitness to practise as a dentist granted by the Royal College of Surgeons of England from taking or using the title of certified Dentist, or if he has obtained a certificate before the passing of this Act, the title of Licentiate in Dentistry, or impose any penalty on such person for taking or using such title.

Nothing in this section shall impose any penalty on any person engaged solely in the cure or treatment of the diseases or injuries of animals, and not of human beings.

MISCELLANEOUS.

43. *Bachelor of Surgery.*—The degree of Bachelor of Surgery, conferred either before or after the passing of this Act by any University legally entitled to confer the same, shall be deemed to be one of the qualifications described in Schedule A of the Medical Act.

44. *Degrees or Diplomas in State Medicine.*—Degrees or diplomas in State Medicine conferred before or after the passing of this Act by any Medical Authority legally entitled to confer the same shall be deemed to be one of the qualifications described in Schedule A of the Medical Act.

45. *Notices may be served by Post.*—All notices and documents required by this Act to be sent may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of post; and in proving such sending it shall be sufficient to prove that the letter containing the notice or document was prepaid and properly addressed and put into the post. Notices and documents may be in writing or in print, or partly in writing and partly in print; and may be sent addressed to the General Medical Council, or the Medical Examining Board, or the Medical Authority, or to some officer of such Council, Board, or Authority, at the principal office or building belonging to such Council, Board, or Authority.

46. *Majority of Medical Authorities to act.*—Any power given by this Act to, and anything authorised or required by this Act to be done by, the Medical Authorities of any one part of the United Kingdom may, in the case of England and Scotland, be exercised and done by not less than five, and in the case of Ireland, by not less than four, of such Medical Authorities.

47. *Corporate Seal.*—The corporate seal of the General Medical Council shall not be affixed to any document except by the authority of such Council, and in the presence of not less than three members thereof, who, after such seal is affixed, shall also sign such document, and the same shall be countersigned by the chief Registrar.

48. *General Repealing Clause.*—All clauses of the Medical Act (1858) and all clauses of other Acts which are inconsistent with this Act shall be and hereby are repealed.

FIRST SCHEDULE.—THE MEDICAL ACTS.

Year and Chapter of Act.	TITLE.	SHORT TITLE.
21 & 22 Vict., cap. 90 ...	An Act to Regulate the Qualifications of Practitioners in Medicine and Surgery.	The Medical Act, 1858.
22 Vict., cap. 21	An Act to Amend the Medical Act (1858)	The Medical Act, 1859.
23 & 24 Vict., cap. 7 ...	An Act to Amend the Medical Acts.	The Medical Acts Amendment Act, 1860.
23 & 24 Vict., cap. 66 ...	An Act to Amend the Medical Act (1858)	The Colleges of Physicians Act, 1860.
25 & 26 Vict., cap. 91 ...	An Act to Incorporate the General Council of Medical Education and Registration of the United Kingdom, and for other purposes.	The Medical Act, 1862.
31 & 32 Vict., cap. 29 ...	An Act to Amend the Law relating to Medical Practitioners in the Colonies.	The Medical Act Amendment Act, 1868.

SECOND SCHEDULE.—MEDICAL AUTHORITIES.

Medical Authorities in England.	*Medical Authorities in Scotland.*	*Medical Authorities in Ireland.*
The University of Oxford.	The University of Edinburgh.	The University of Dublin.
The University of Cambridge.	The University of Aberdeen.	The Queen's University in Ireland.
The University of Durham.	The University of Glasgow.	The King and Queen's College of Physicians in Ireland.
The University of London.	The University of St. Andrews.	The Royal College of Surgeons in Ireland.
The Royal College of Physicians of London.	The Royal College of Physicians of Edinburgh.	The Apothecaries' Hall of Ireland.
The Royal College of Surgeons of England.	The Royal College of Surgeons of Edinburgh.	
The Apothecaries' Society of London.	The Faculty of Physicians and Surgeons of Glasgow.	

THIRD SCHEDULE.—FORM OF REGISTER.

Date of Registration.	Part of the United Kingdom in which examined.	Name.	Residence.	Name of Medical Authorities, and the Diploma, Degree, or Title (if any), granted thereby.

ROYAL COLLEGE OF SURGEONS.

PROFESSOR ERASMUS WILSON'S LECTURES ON DERMATOLOGY.

LECTURE III.

IN his third lecture Mr. Wilson proceeded to describe the squamous forms of eczema under two chief varieties—viz., pityriasis and psoriasis, two leading features of eczema, hyperæmia and disordered formation (exfoliation) of the cuticle, being present in each case. Mr. Wilson explained that the term psoriasis had been applied erroneously to the lepra of the Greeks—our lepra vulgaris; but its application ought to be confined to the squamous phase of ordinary chronic eczema. Before proceeding to describe the secondary changes—which occur as the result of the continual hyperæmia in eczema—in the corium, giving rise to induration and hypertrophy of the corium and epidermal textures, Mr. Wilson passed in review the ground which he had already traversed, with the view of showing that the preparations at present in the museum illustrated the fact that there were transitional forms between the several varieties of eczema he had described; and he observed that excema might be said to be not only erythematous, papulous, ichorous, squamous, pustular, &c., but also divisible into two chief types, the moist and the dry. These points were shown by a reference to the models and drawings. Passing on to note eczematous infiltration, thickening, induration, and fission, a series of preparations were exhibited, with a view of demonstrating—(*a*) the hypertrophy of the epidermis, which is often seen as a consequence of eczema, especially about the palms of the hands and the soles of the feet; (*b*) hypertrophy of the papillæ cutis, described by the French under the most misleading title of lichen hypertrophique, the term lichen, as Mr. Wilson observed, being applicable to papules formed by the erection and inflammation of the follicles of the skin; (*c*) hypertrophy of the fibro-cellular tissues in the condition, termed false elephantiasis, but by Mr. Wilson denominated eczema spargosiforme, a variety of eczema which was termed in America, some years since, erythema papulatum et tuberculatum, to puzzle dermatologists, up to this time, until the present explanation as to its real nature; (*d*) hypertrophy of the nails, the part formed by the matrix being specially affected; and lastly (*e*) mucous eczema, in which a peculiar secretion was poured out upon the skin, forming a crust and covering over a softened and reddened base of integument, presenting much the aspect of mucous membrane. A favourite seat, however, of this disease is the lip, the surface being covered with an irregular light-yellow mask, as it were, of exudative matter, the mucous membrane not being ulcerated.

THE ARMY ESTIMATES.

THE army estimates have just been laid upon the table of the House by Mr. Cardwell, and our readers may probably be interested in learning some of the details bearing upon the medical establishments and services and other matters of a sanitary or medical character.

Imprimis, the increase to Vote 4 (Medical Vote) amounts to the very modest sum of £800 only. Additional medical officers will, we are informed, be appointed to meet the requirements of troops quartered in detached stations, but the increased charge is counterbalanced by the absorption of the large number of supernumerary officers in excess last year. One of the changes effected in the present estimates ought not to escape attention. The charge for the staff of the office of the Director-General has been transferred from Vote 16 (War Office) to that for medical establishments and services (Vote 4). The Note following prepares us for some change in hospital administration, with the view of dovetailing the functions and defining the powers of the medical service under the new Control system. The transfer of the management of all services within the hospitals to the medical officers places the control of the wages of servants under them. The Army Hospital Corps has also been increased in order to improve the arrangements for the internal service of hospitals under the control of medical officers of the army. It is clear that such control is not meant to refer to Netley, however, for there is now, in addition to the governorship, a new appointment in the shape of an Assistant-Governor to aid the former officer in the discharge of duties which, in the opinion of most people, have long partaken more of a nominal than real character. To proceed with our analysis, however, we find that the cost of the Director-General's establishment is estimated at £5747. This sum includes the magnificent official salary, amounting to £1500 per annum, drawn by the Director-General himself! Law, however, has less to do and gets more for doing it. The solicitor to the War Office has, it appears, the same salary as the Director-General of a very large medical service, and is, moreover, aided by an assistant-solicitor at £1000 per annum—£2500 for the two. The number of staff and regimental officers in the department, exclusive of the large contingent serving in India, is estimated as 613 for 1871-72, as against 587 of the present financial year. The number in the inspectorial ranks remains the same; but there is an increase of 7 in the surgeons-major and surgeons, and of 19 in the rank of assistant-surgeons. Among the savings that have been effected, it may be mentioned that, although about 20,000 men have been added to the strength of the army, the sum for medicines and surgical instruments is £1000 less than formerly; and the weather has so far improved that the vote for meteorological instruments is also reduced £50! These are facts that would have delighted Joseph Hume, and possibly, as far as the diminished consumption of medicines is concerned, the British soldier may be congratulated. It is, however, to be regretted that what official ingenuity has been enabled to save in one direction should be lost in another; for the same page shows that the Governor and Commandant at Netley has £366 per annum, in addition to the half-pay of his rank, and that the Assistant-Commandant gets £303 for aiding and abetting the Governor in discharging duties the lightness of which may well weigh down the mind of any one man. The total cost of the Military Medical School at Netley is £8854; and we are told that the contribution of the Indian Government towards the expenses of the school is now under consideration. In Vote 13 (Works, Buildings, &c.) we find several items possessing interest of a sanitary kind. The estimated cost of filling up the mill-dam at Portsmouth is £10,000, of which sum £6000 is still required to complete the work. The cost of the new Netley Lunatic Hospital is estimated at £18,838, and the amount already voted for it is £25,000. The new barracks at Glasgow are to cost £96,000, £50,000 of which is included in the estimates for 1871-72. The new hospital at Malta is included in the estimates, as well as a sum for providing water-supply at that station. The sum paid to private asylums for the care and maintenance of military lunatics amounts to £12,000, but the half-pay and pensions have to be deducted from this amount, leaving a balance of £5000 to be provided for. It will be remembered that the men composing the detachment of the Ceylon Rifle Regiment stationed at Labuan suffered terribly in health, and that the mortality from beri-beri and malarious fever was great among them. We perceive that the troops are very wisely to be withdrawn from Labuan, where they will be replaced by a police force; this will allow the Ceylon Rifle Corps to be reduced by two companies.

THE NAVAL MEDICAL SERVICE.

WE are happy to announce that the Admiralty have at last arranged with the War Office that the assistant-surgeons who shall enter the naval service shall for the future have the advantages of attending Netley Hospital School, and of profiting by the special professional instruction there afforded. By this act the Admiralty has, we say it advisedly, done more to raise the status of the Naval Medical Service than by any order which has been promulgated of late years, not excepting even the withdrawal of the captain-superintendents from the naval hospitals. We fear that it

is too late for this most satisfactory arrangement to affect the entry of assistant-surgeons at the coming examination, but there can be no doubt that it will produce a most beneficial effect upon the state of feeling in the medical schools of this country *quoad* the navy. The Admiralty and the Director-General are both to be congratulated on the result of their labours; and the War Office authorities also merit a word of approbation for the liberal manner in which they have met the overtures from the sister service.

Dr. James Wingate Johnston, retired Inspector-General of Hospitals and Fleets, who has been awarded the good service pension in the place of Dr. John Wilson, deceased, entered the Naval Medical Service as assistant-surgeon in 1825, and after serving in that capacity for upwards of six years on the North American and Home Stations, and on particular service, was promoted to the rank of surgeon in 1832, in which capacity he served with great credit on the North American, West Indian, South American, Pacific, and Home Stations, and also in charge of two convict-ships. He was promoted to the rank of Deputy Inspector-General in 1847, and was employed as Deputy Inspector-General of the fleet under the command of the Earl Dundonald on the North American and West Indian Stations, and subsequently in the same capacity, for nearly four years, at Jamaica Hospital, during the prevalence of cholera and yellow fever, and afterwards at the Royal Naval Hospitals at Deal, Chatham, and Greenwich. He was promoted to the rank of Inspector-General in 1864, and his name was placed on the retired list in November, 1868. Dr. Johnston has been awarded Sir Gilbert Blane's Gold Medal, and is Honorary Surgeon to the Queen.

Correspondence.

"Audi alteram partem."

CAN THE DEAD CONVEY INFECTION?

To the Editor of THE LANCET.

SIR,—The letter of Dr. S. Wilks presses upon the consideration of the profession a subject of great importance, and I trust it will lead to a general expression of opinion, which may set at rest the question, involving, as I believe it does, points of deep interest.

I can truly say that Dr. Wilks's letter, emanating from so high an authority, has completely upset all my previous views. For twenty years I have laboured to impress upon people, often at the cost of giving serious offence, the paramount importance of more than usual early interment of persons dying of contagious diseases, under the impression that the extra risk of infection was very great. For the most part, my labours in this direction have been ineffectual, and I have often mourned over the sight of the corpse of a person who has died of scarlatina or measles lying in the same house, and frequently the same room, with living beings for three or four days. My experience has been derived in very great measure from my official position as medical officer to large Union districts, and too often in connexion with cottages in which sanitary arrangements have been most defective. Of course, private practice has also afforded me many opportunities, and here the length of time between death and interment has generally been longer; yet I am compelled honestly to admit that, in spite of solemn protestations against such practices, I cannot recall to my mind a single instance in which there was any good ground for supposing that the dead body did the mischief anticipated.

Although, for many reasons, I consider early interment, as a rule, desirable, yet it will occur to your readers that sometimes serious inconvenience must result, especially in the country, where decent mourning cannot be always provided at a day's notice. Friends at a distance cannot attend, and the feelings of the husband, wife, parent, or child are often rudely violated by the importunity of those around to hastily dispose of the body of the dearly-loved one; yet, believing in the ordinarily received opinion, duty imperatively called upon medical men, as conservators as well as restorers (under God's blessing) of health, to set aside feelings for the sake of propriety—to bury the dead out of the sight of the living.

But there is another point for consideration. We all know the general feeling that the corpse of a person dead of contagious disease should not be carried into the church, and frequently we have witnessed the bitter grief of the survivors at the supposed slight to the memory of the deceased. And although no manner of good whatever can result from the custom of carrying a corpse within the sacred building, yet at such times friends are peculiarly sensitive and ill-fitted to consider the prejudices of other persons; and when, as is so often the case, it occurs to our *poor* brethren, and the remains of *their* dead are barred out, the case is considered specially grievous, and comparisons are drawn between the different treatment of the poor and the rich.

What medical man of feeling has not been called on to soothe the irritation felt in such a case. It matters little to say that bearers have been taken ill after funerals of this kind. We must first take into consideration the effect of *fear* produced by the disagreeable smell occasionally exuding from the body through a badly made coffin, predisposing to take infection from the various sources which are always at hand in the case of epidemic contagious diseases, and we are well aware that this smell is frequently noticed in persons who have died of *non*-contagious diseases.

And now to come to the pathological question. I presume Dr. Wilks entertains the idea that (to take scarlatina for example) with the death of the body the instantaneous destruction of the vital germs thrown off by the skin would also take place; and it must be admitted that this is a rational supposition. Dr. Wilks has given the valuable testimony of negative, and I think he may fairly call for positive evidence (if obtainable) that the specific disease has ever been communicated by a dissection wound—e.g., that scarlatina has ever thus produced scarlatina or variola, &c.; in fact, we want proof that any other than the ordinary results of inoculation of the veins generated in the body by post-mortem changes have ever occurred. My own experience does not enable me to give any opinion on the matter.

I am, Sir, your obedient servant,

Cerne Abbas, Feb. 7th, 1871. JOHN EWENS, L.R.C.P.

THE EMPLOYMENT OF MERCURY IN HEPATIC DISEASES.

To the Editor of THE LANCET.

SIR,—As it must be obvious to your readers that the scientific question as to the employment of mercury in hepatic diseases has nothing to do with the unfounded charges and continued misconceptions of Dr. Rutherford, I must decline any further controversy with that gentleman, as being utterly useless in elucidating a point of medical practice. I have proved that I never attacked the medical department of the army as he alleged, but, instead of accepting my explanation, he repeats the offensive statement, adding "*or words to that effect*," comment upon which is unnecessary.

I have no objection, however, to argue this question with Dr. Maclean so long as no personalities are introduced into the discussion. When I state that thousands of soldiers have been treated for hepatic diseases with mercury, and that many of these have had their healths thereby injured, I put forth a proposition I am ready to defend. But when I am asked *who* so treated them, and because they may have been army surgeons, it is alleged I insult those gentlemen, I repudiate such a statement as contrary to common sense and to the spirit of free criticism which is so necessary in every teacher who refers to the history of the past.

"If," says Dr. Maclean, "the man, Nicholas H——, was foolish enough to rub himself with the mercurial ointment twice or thrice a day, as he is said to have done, it would account for the signs of mercurial action observed by Dr. Bennett, without a shadow of blame attaching to anyone here." Exactly so. I never attached blame to anyone, and that I did do so results only from the exaggerated and heated views of Dr. Rutherford. But that the man, as a

matter of fact, was salivated in Jhansi, had his mouth constantly sore afterwards in India, was again salivated after he left the Netley Hospital, and that such treatment failed to cure his liver disease, and shattered his health, are truths which, though they have been attempted to be got rid of, are obvious to every well-qualified observer.

I agree with Dr. Maclean in thinking this subject, not of professional interest only, but of national importance. On that broad ground I am willing to enter upon it. In a few of the medical wards of the Royal Infirmary at this moment are no less than eleven discharged soldiers, eight of whom have been salivated in India, two of them for hepatic diseases. They all say (I do not know how far correctly) that mercury was given largely in the army for various diseases, and that it is consistent with their knowledge that many of their comrades have been long salivated, and have had their health thereby injured. This illustrates a point of practice worthy Dr. Maclean's attention, the more so as it would appear that the records of the Netley Hospital during eight years, and after the examination of 29,543 men, afford no evidence of it, any more than they did of the mercurial action in the case of the soldier Nicholas H——.

I propose, however, to publish my paper. In the meantime I would beg that your readers will suspend their opinions on this important matter till the real facts are fairly before them.

I am, Sir, your obedient servant,

Edinburgh, Feb. 11th, 1871. J. HUGHES BENNETT.

CLINICAL EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—In regard to the proposal to introduce a clinical examination into the subjects required for the licence of the College of Physicians in Ireland, I would beg to state that such a practice has been followed for several years past with the best results at the examinations for the medical and surgical degrees of the Queen's University in Ireland. Candidates are taken to the Workhouse Hospital in Dublin, and there their knowledge is clinically tested. As previous access to its wards is not allowed to students, any collusion or favouritism is thereby precluded, which otherwise must inevitably occur if it were conducted at a hospital or hospitals with which any of the candidates were connected.

I am, Sir, your obedient servant,

Cashel, Feb. 1871. R. HOLMES, B.A., M.D.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

THE Colleges have not yet come to any combined resolution on the matter of the medical charities. During the winter, whilst many students attend the charitable dispensaries, the sick poor are tolerably well looked after by them under the superintendence of the medical officers of these institutions; but when students are out of town, there is great difficulty in providing home medical attendance for the class who, whilst not in the receipt of parochial relief, are too poor to call in regular practitioners. The report, I understand, proposes that all the medical officers of the suggested dispensaries are to be paid for their work, that more dispensaries should be established in such parts of the city as require them, and that, except in emergencies, those patients only are to receive advice or attendance who are recommended by the parochial inspectors. The medical officers are to be appointed by the managers of the parochial boards, but to be deposed from office only by the board of supervision. A certain number of inspectors are to be appointed to see that the duties are efficiently done, whilst the head inspector is to have a seat at the Board of Supervision.

The University Court, in appointing the Examiners in Medicine, had to select a successor to Dr. Warburton Begbie. They have appointed to this office Dr. William Dumbreck, F.R.C.S.E. In this they have acted very judiciously, and the selection appears to give general satisfaction. The other examiners, Dr. W. Robertson and Dr. Benjamin Bell, were reappointed.

The proposal to have an annual competition amongst the universities in out-door sports is a good one, and will give an impetus to the training of the physical organisation of our students. It is proposed, I understand, to hold the first "Inter-University Games" in the course of next month.

The "New Town Dispensary," from the report made at the annual meeting held last week, maintains its efficiency, nearly 11,500 patients having been treated during the past year. The expenditure had exceeded the revenue by £61 15*s.* 8*d.*, the former being £419 1*s.* 4*d.*, whilst the latter was only £357 5*s.* 8*d.* The managers therefore appeal to the public for increased subscriptions.

Another charitable society, that for "the relief of persons suffering from incurable diseases," presents a very favourable report of its work during the past year. A few years ago it was only able to give assistance to 40 sufferers, but now there are 200 on the list of recipients, each receiving £4 yearly. This society expects to get a share of the estate left by the late Dr. J. R. Sibbald.

Whether this city will suffer from small-pox is exciting some interest. In reply to a letter signed "Medicus," Dr. Husband, the head of the Scottish Vaccine Institution, states in to-day's paper that Edinburgh is well prepared to resist an epidemic of this disease, and assures the public that, from the success of the compulsory Vaccination Act of 1863, it may be affirmed almost without qualification that we have all the security against small-pox which universal infant vaccination can obtain. He concludes his very interesting letter by remarking that our chief concern now is, that everyone should make sure he is not mistaken in supposing himself well vaccinated in infancy; that the unvaccinated should be searched for among the migrating population (which is being done by the officer of health); that those desiring absolute security should be revaccinated; that infants should be vaccinated earlier than usual, and that at all times vaccination should be performed at or before the age of three months. It will be interesting to watch the progress of small-pox among us, for I believe it would be difficult to find a city where infant population is better vaccinated than Edinburgh.

Edinburgh, Feb. 14th, 1871.

THE CONDITION OF PARIS.

(FROM OUR OWN CORRESPONDENT.)

IN my last note I mentioned some of the phenomena of hunger on the large scale. Since that communication was dispatched, the *revitaillement* of Paris has been proceeding at a rapid pace, thanks to British charity and British energy; almost every person, poor as well as rich, has enjoyed a succession of good and hearty meals. Many, in so far as food is concerned, would almost forget that they have ever undergone the hardships and privations of a siege; but yet the effects of that siege, instead of disappearing all at once, are, in some respects, becoming more pronounced than ever. There are many persons, and especially delicate women, who, in consequence of long-continued privation and unsuitable food, now suffer from hæmorrhages in various forms—epistaxis, hæmaturia, and so on. The languor and feeling of coldness previously mentioned, although by no means gone, have been materially lessened since the distribution of fatty food took place; and, as showing how strong was the desire for aliment of that description, I note the fact that, when on the first occasion a supply of fresh butter was brought into the city, I took a piece to a lady of my acquaintance, so very eager was she for the oleaginous material that she literally took a bite of it out of the paper in which it was rolled, without waiting for the piece of *white* bread I in the meantime was endeavouring to disinter from another somewhat capacious pocket. Her system was, to all intents and purposes, coming to a standstill in consequence of the want of fatty matters of supply, as completely as a steam engine when the furnace is deprived of coal. Nor could I avoid drawing from the incident related an illustration of the reason why the English regular agricultural chawbacon, otherwise badly and insufficiently fed, manifests his notorious but instinctive desire for the food from which he obtains his familiar

sobriquet. In so far as the item of food is concerned he may be said to undergo a kind of chronic siege of Paris.

You are probably aware from other sources that this city had only food till the 5th instant, or at all events was said to have had so at the time of the signature of the convention, armistice, capitulation, or whatever else the document was called, under the provisions of which the Prussian forces now occupy the surrounding forts, the Prussian flag has taken the place of the tricolour, the fortifications are being dismantled, the barricades thrown down, and the regular troops of Paris disarmed. The condition of the sick, and especially the wounded, had been going from bad to worse, and from worse to still worse for some time before. Men from whose wounds, stumps, resected bones, excised joints, and so on, pus distilled at the rate of several ounces per day, required very large quantities of animal food to supply the necessary materials of expenditure. But this was impracticable. Science failed to produce actual beef or mutton by any other process than the slaughter of cattle and sheep, and these not being obtainable, merely because they did not exist within the line of fire and steel drawn by the Prussians around us, the very men who had fallen and bled for honour and France had their chances of recovery considerably lessened by the existing dearth. Throughout the siege, mortality in general, but more particularly of the wounded, has progressively increased. After the great sortie towards Malmaison, on October 21st, it was found that many of the severely wounded did well, although by no means so well as those who had been injured on the occasion of the smaller affair of September 20th. After the terrible action at Champigny, on November 30th, the wounded *did very badly*; after Drancy and Bourget, on December 21st, still more badly; and after the last, and it is to be hoped concluding, affair at Montretout, on January 19th, no better. In fact, as fatigue and privation increased, so did the chances of recovery of the wounded diminish.

By the way, one circumstance connected with the wounded on the last-named occasion may be mentioned as illustrating, not only the great amount of previous fatigue the French soldiers had undergone, but how such fatigue may, under some conditions, prove too powerful a soporific to be neutralised by even gunshot and shell wounds. Some sixty-four men, more or less severely wounded, had in the course of the day been brought from the field of battle to the American ambulance, where, it is quite needless to say, they received the best of surgical assistance and of non-professional attention. Early in the evening I visited the tents in which they lay. Literally the whole number were sound asleep, and in so still and sound a sleep that it was difficult to believe they really were wounded; yet some had bullets through their limbs, some of the long bones being broken, some through hands and feet, and one poor fellow presented, as he lay still and in deep slumber, the jagged borders of a bullet firmly impacted in his frontal bone. Not one of them had had a drop or grain of opium in any form, nothing beyond soup, tea, coffee, comfortable bed and kind attention. Soon afterwards the bullet was extracted from the man's frontal bone. Extensive fracture was discovered, and three days subsequently he was numbered among the dead.

Paris, Feb. 9th, 1871.

THE LANCET BILL.

AT a meeting of the Ulster Medical Society, held in the Library of the Belfast General Hospital, on Saturday, Jan. 28th, 1871, the Council submitted THE LANCET Medical Bill for the consideration of the Society. The following resolutions were passed:—

1. That the members of this Society thank the Editor of THE LANCET for the Medical Act Amendment Bill he has published on November 26th, 1870. That they cordially approve the two leading features of the Bill—viz., the one-portal, and representation of the profession on the Medical Council.

2. That we consider Clause 5 should stand thus:—"The General Council shall consist of sixteen persons, as follows: Four shall be nominated by her Majesty, with the advice of her Privy Council; two of whom shall be appointed for England and Wales, one for Scotland, and one for Ireland. Twelve shall be elected, in the manner hereinafter provided, by the registered medical practitioners of the United Kingdom—namely, six by the registered practitioners of England and Wales, three by the registered practitioners of Scotland, and three by the registered practitioners of Ireland. All these appointments shall be for a period of three years."

3. Clause 14 should stop after the words "or under this Act."

We consider that, with the exception of those members of Council nominated by the Crown, *all* should be elected by the votes of the profession at large. Referring to the resolution on Clause 14, we are most decidedly of opinion that no candidate should be permitted to present himself before a medical authority for examination, until he is registered as having passed through the *one portal*.

Parliamentary Intelligence.

HOUSE OF COMMONS.

FEB. 13TH.

THE VACCINATION ACT OF 1867.

MR. W. E. FORSTER moved for a committee to inquire into the operation of the Vaccination Act (1867), and to report whether such Act should be amended. This committee was proposed by the Government in fulfilment of a pledge given towards the close of last session by the Home Secretary to the hon. member for Sunderland. Mr. Forster cited many facts illustrative of the benefits of vaccination, and said he was strongly of opinion that a committee would do good. There were certainly some persons in the country who entertained a conscientious objection to vaccination, on the ground that it would do their children harm, and he thought the evidence which would be adduced before the committee would tend to convince those persons of their error. He hoped that the committee, if appointed, would feel it to be their duty to report as speedily as possible.

Sir C. ADDERLEY opposed the appointment of the committee, contending that there was no longer anything to inquire into. Mr. CANDLISH said that the law was in a most unsatisfactory state. Dr. BREWER and Lord R. MONTAGU supported the committee. Dr. L. PLAYFAIR took a similar view, and said he would have supported the motion for a committee last year, but that he did not wish to impair the public faith in vaccination at a time when he believed that a great wave of epidemic was rolling towards this country.—The motion was agreed to.

THE ROYAL SANITARY COMMISSIONERS.

In reply to Sir C. Adderley,

Mr. BRUCE thanked the Commissioners for the great care and labour they had devoted to this subject, and the special pains they had taken to promote legislation. Several of the departments connected with the administration of the sanitary law were giving attention to the subject, and if the right hon. gentleman waited for about three weeks he would find that the labours of the commission had not been vain.

FALSE WEIGHTS AND ADULTERATIONS.

In reply to Lord E. Cecil,

Mr. BRUCE said a Bill was in preparation with regard to the use of false weights and measures, which the President of the Board of Trade hoped to be able to introduce in the course of the session. He intended to introduce a stringent clause into the Licensing Bill, which he hoped would be effective as regarded the adulteration of drinks. But with regard to the adulteration of food and drugs, he did not think he could introduce a Bill this session.

FEB. 14TH.

MINES REGULATION AND INSPECTION.

Mr. BRUCE moved for leave to bring in a Bill to consolidate and amend the Acts relating to the regulation of mines in the United Kingdom. The Committee on mines recommended a modification of the rule requiring coal mines to have a sufficient amount of ventilation to dilute the noxious gases, but he, having consulted the inspectors, thought it better to retain the regulation in its present form. Certain modifications had been made in respect of

children employed in mines, but with few alterations the Bill was identical with the measure which had been previously before the House.

CORONERS.

Mr. GOLDNEY got leave to introduce a Bill to amend the law relating to the election and office of coroners.

THE POLLUTION OF RIVERS.

In reply to Mr. Dimsdale,

Mr. BRUCE said he should be glad if it were in his power to bring in a Bill this session for the prevention of the pollution of rivers by sewage, but he was pressed for time, and, moreover, he had not yet received the report of the Commissioners.

LUNATICS AND HABITUAL DRUNKARDS.

Mr. DALRYMPLE moved for and obtained leave to bring in a Bill to amend the Law of Lunacy, and to provide for the management of habitual drunkards. The hon. gentleman said the Bill differed but little from the Bill of last session.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — At a meeting on February 7th the undermentioned gentleman passed his primary professional examination:—

Coffin, Richard James Maitland.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 9th:—

Cooper, George Joseph, Dacre-park, Lee.
Robinson, John Desborough, Syston, Leicestershire.

The following gentlemen also on the same day passed their first professional examination:—

Dunn, William Allison, St. Bartholomew's Hospital.
Jenkinson, Harold, Leeds Hospital.

COLLEGE OF PHYSICIANS, IRELAND.—At examinations held on Feb. 8th and 9th the following gentlemen obtained the licence in Medicine and Midwifery:—

LICENCE IN MEDICINE.—Wm. Burt Shorto, David Brown, John Hoysted, Paul S. Connolly, Robert Willcocks Kelly, George William Macllwee, Thomas Munns Wills, John Kilbride, Morgan Philip O'Leary.

LICENCE IN MIDWIFERY. — William Wilson, John Hoysted, Paul S. Connolly, Robert Willcocks Kelly, George William Macllwee, Thos. Munns Wills, John Kilbride.

MR. ERASMUS WILSON, F.R.S., will preside at the next house dinner of the Medical Club, which takes place on Tuesday, the 21st inst., at seven o'clock P.M.

HUNTERIAN SOCIETY. — At the annual general meeting of this Society held on the 8th inst., the following officers were elected for the ensuing year:—President: Mr. D. De Berdt Hovell. Vice-Presidents: Mr. Thos. Bryant, Dr. J. Hughlings Jackson, Dr. Robert Fowler, and Mr. Charles F. Maunder. Treasurers: Dr. Thomas Mee Daldy and Mr. Thomas Brown. For the Oration of 1872: Dr. J. Hughlings Jackson. Librarian: Dr. Fowler. Secretaries: Dr. John J. Phillips and Mr. James E. Adams.

BEQUESTS, DONATIONS, &c. — Mr. Alfred Smith Evans bequeathed as follows to the medical charities of Birmingham—viz., £1000 to the General Hospital; £1000 to the Queen's Hospital; £300 to the General Dispensary; and £300 to the Children's Hospital. "S. W. Y." has, for the third time, sent £1000 to the Great Northern Hospital; the Worshipful Company of Clothworkers, £52 10s.; J. P. Jodrell, Esq., £25 (£5 5s. sub.); and the Marquis of Bute, £5 5s. The Middlesex Hospital has received a third donation of £1000 from "D. T. S." The Small-pox and Vaccination Hospital has received a second donation of £1000 from "D. V." The Royal Infirmary for Children and Women, Waterloo-bridge-road, has received £1000 from "E. F. L." The Cumberland Infirmary has received £1000 under the will of Miss Cust. The Chester Infirmary has become entitled to £500 under the will of John Morris, Esq. The Whitehaven and West Cumberland Infirmary has become entitled to £200 under the will of Mrs. Armistead. The London Hospital has received £100 from Sir Thomas Tilson, and £31 10s. each from Messrs. A. C. Bryant, F. C. Byrant, and H. Wagner. "G. S. W." has given a second donation of £1000 to University College Hospital.

Medical Appointments.

ALLEN, C. D., M.B., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Glenarm Dispensary District of the Larne Union, Co. Antrim, vice John S. Holden, M.D., L.R.C.S.Ed., resigned.

BAGNALL, S. F., L.R.C.P.L., M.R.C.S.E., has been appointed Senior House-Surgeon to the Preston and County of Lancaster Royal Infirmary, vice J. C. Weddell, M.D., resigned.

BROWNE, T. L., L.R.C.P.Ed., has been appointed Medical Officer for the Hope District of the Wrexham Union, vice Parry, deceased.

CASS, E. E., M.R.C.S.E., has been appointed Junior House-Surgeon to the Preston and County of Lancaster Royal Infirmary, vice John Buxton, M.B., C.M., resigned.

FERNIE, A., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Barnstaple Union.

GULL, F., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Coddenham District of the Bosmere and Claydon Union, Suffolk, vice B. Blomfield, M.R.C.S.E., deceased.

HETHERINGTON, Dr. C. E., has been appointed Resident Assistant-Surgeon and Registrar to the County Down Infirmary, Downpatrick, vice Dr. J. Simms, resigned.

JOHNSON, Dr., of Bedford-street, Bedford-square, has been appointed a Visiting Physician to the Infirmary for Consumption and Diseases of the Chest, Margaret-street, Cavendish-square.

MEAD, H. T. H., M.R.C.S.E., has been appointed Medical Officer for the Western District and the Workhouse of the Christchurch Union, vice J. Fitzmaurice, M.R.C.S.E., resigned.

MENCE, W. H. D., M.R.C.S.E., has been appointed Medical Officer for the St. Ives District of the St. Ives Union, Huntingdonshire, vice W. R. Grove, resigned.

NETTLE, W., M.R.C.S.E., has been appointed House-Surgeon and Secretary to the Cornwall Royal Infirmary, Truro, vice R. V. Ash, L.R.C.P.L., M.R.C.S.E., appointed Medical Officer for the Skirlaugh District and the Workhouse of the Skirlaugh Union.

OGLE, J. W., M.D., F.R.C.P.L., has been appointed Hon. Physician to the Royal Asylum of the St. Anne's Society, vice T. Mayo, M.D., F.R.C.P.L., deceased.

SHAW, O. S., M.R.C.S.E., has been appointed Assistant Medical Officer at the West Derby Union Workhouse, vice J. P. Ryan, L.K.Q.C.P.I., resigned.

SHORTO, W. B., M.R.C.S.E., has been appointed an Acting Medical Officer to the Southampton Dispensary and Humane Society.

STOVIN, C. F., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer and Public Vaccinator for the Waterperry District of the Thame Union.

TENNANT, G., M.B., C.M., has been appointed a Visiting Assistant to the Newcastle-upon-Tyne Dispensary, vice Wm. Anderson, M.R.C.S.E., resigned.

USHER, T. S., M.D., M.R.C.S.E., has been appointed Medical Officer for the Bingley District of the Keighley Union, Yorkshire, vice D. Glendinning, M.D., deceased.

WATSON, W. E., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Halfway District of the Parish of Dundonald, Ayrshire, vice Hunter, resigned.

WATTS, A. N., M.R.C.S.E., has been appointed an Acting Medical Officer to the Southampton Dispensary and Humane Society.

WEAVER, J., L.R.C.P.Ed., has been appointed Medical Officer of Health for Longton, Staffordshire.

WILLIAMS, J. LL., M.B., C.M., has been appointed Medical Officer of Health for Wrexham.

WILTON, J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the South Metropolitan School District School, Sutton, Surrey.

WILSON, A., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed a Visiting Assistant to the Newcastle-upon-Tyne Dispenary, vice Charles Carr, M.R.C.S.E., resigned.

Births, Marriages, and Deaths.

BIRTHS.

CLARKE.—On the 10th inst., at Curzon-street, Mayfair, the wife of Wm. Fairlie Clarke, F.R.C.S.E., of a son.

HULKE.—On the 8th inst., at Deal, the wife of Dr. Frederick T. Hulke, of a son.

THORNE.—On the 8th inst., the wife of F. Thorne, M.R.C.S.E., of Leamington, of a son.

THURSTON.—On the 6th inst., at Ashford, Kent, the wife of Edward Whitfield Thurston, Surgeon, of a son.

WRIGHT.—On the 7th inst., at Dover, the wife of Joseph C. H. Wright, L.K.Q.C.P.I., Surgeon 2nd Batt. 17th Regiment, of a son.

MARRIAGES.

DAVIES—THORNBER.—On the 9th inst., at St. Bartholomew Church, Colne, John Davies, L.R.C.P.Ed., of Southport, to Elizabeth Ann, only daughter of the late Thomas Thornber, Esq., of Colne.

MASON—SLATER.—On the 8th inst., at Chislet, Thomas Edward Mason, M.D., of Deal, to Caroline, daughter of Edward Slater, Esq.

DEATHS.

BULLOCKE.—On the 7th inst., at Falmouth, J. J. A. Bullocke, L.S.A.L., late of Constantine, aged 73.

CHESTERMAN.—At Newbury, suddenly, Shearman Chesterman, M.R.C.S.E., of Banbury, aged 67.

HUNT.—On the 4th inst., at Sherwood, S. Hunt, M.R.C.S.E., late of Loughborough, aged 74.

KIDD.—On the 7th inst., at Armagh, Laura Isabella, wife of A. Napier Kidd, M.D., F.R.C.S., aged 26.

SMITH.—On the 7th inst., Joseph Smith, M.R.C.S.E., of Milford-place, North Brixton, late of the Clapham-road, aged 78.

Notes, Short Comments, and Answers to Correspondents.

BELGRAVE HOSPITAL FOR CHILDREN.

AN appeal in behalf of this excellent charity appears in a contemporary. Situated so as to reach the crowded districts of Westminster, Chelsea, and Pimlico, all of them infested with gregarious poverty, and, often, gregarious disease, the Belgrave Hospital for Children has proved inadequate to the fulfilment of its most laudable design. The wards are too small. The out-patient department requires to be enlarged and separated. A special ward for the reception and isolation of fever and other contagious cases is urgently demanded. Even if the charity is to continue in its necessarily limited sphere of usefulness, additional subscriptions should be forthcoming. Nothing can surpass the judiciousness with which the subscriber's guinea has hitherto been disposed of. Will the profession use its practically infinite opportunities with the lay public for the support of this institution? The demands made on the British people by the continental sufferers have been enormous, and necessitate the prudent bestowal of whatever alms they have yet to spare for domestic charities. In this work the profession can render signal assistance; and, among the home institutions deserving of support, the Belgrave Hospital for Children, we are sure, will not be forgotten.

Fiat Justitia is quite right in urging the importance of factory inspectors being medical men, not only for judging of the physical condition of the juvenile hands, but of the sanitary fitness of the factory itself. "The once-a-year-ten-minutes-man," as our correspondent terms the non-medical factory inspector, may seem fit enough for his post to lay observers; but our correspondent should not heed such vagaries of judgment.

THE communication of *Dr. Arthur Doubis* shall appear in an early number.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Permit me to offer further explanatory remarks on certain points of my pamphlet that have been criticised in your journal.

1. Titles of inferiority lower the status of a profession, and preclude its junior members from receiving privileges due to them. Assistant or second surgeons could not rank in *the naval service* with members of other professions that do not use inferior titles. Therefore all registered practitioners of medicine must be equal as respects professional title.

2. Surgeon of the Fleet or Fleet Surgeon is an absurd title for a ship surgeon. Surely the title is one for a Deputy Inspector or Inspector of Fleets! It is used in the United States navy for an officer of this grade.

3. Pay.—I have not asked for alteration of the present scheme under eight years; but afterwards my scheme is superior to that now in vogue, and finally exceeds it by 4*s.* a day. Thus, 12*s.* 6*d.* is changed into 14*s.*, 14*s.* into 16*s.*, 15*s.* 6*d.* into 18*s.*, 18*s.* into 20*s.*, 20*s.* into 21*s.* and 22*s.* This last sum is proposed at seventeen years of service, after which there is an annual increase of 1*s.* per day up to 33*s.* (the old maximum being 29*s.*) The second edition of my pamphlet contains tables illustrative of the advantages of my scheme over the present rates of pay.

4. Half-pay.—The present rate of 18*s.* 6*d.* as a maximum after twenty-five years is proposed to be changed to 21*s.* after twenty-seven years.

5. Retired pay.—The present maximum of £400 is proposed to be changed to £450. I have asked for optional retirement after twenty years' service on the half-pay earned, £300 to £340—a boon now permitted solely to officers unfit to serve; and I have asked for retirement to be made dependent on service irrespectively of age, the retired pay ranging after twenty-five years from £350 to £450. While allowing earlier retirement than at present, I would secure longer service by higher rewards. It is requisite, in framing schemes, to guard the interests of the public as well as of the profession, and of the profession generally as well as of individuals.

6. The proposition to form a reserved list is put forward for the consideration of the Admiralty. Provision must be made during peace for the emergencies of war, and it is better to adopt a well-considered plan than to contract hurriedly with inexperienced persons during the pressure of war. In respect of loss of the services of good men in ten years, I would remark that a constant current of young blood invigorates a service, and recommends itself to men of progress.

7. Good-service pensions, if granted to officers of the higher grades, as requested by me, would prove inducements to continuous service.

8. The opening of Netley to the navy would be a great boon, which would speedily lead to the abolition of the title of *assistant* in the army—most desirable in a professional point of view.

In conclusion, I beg to state that many schemes might be drawn up of a meritorious character; but that the scheme put forth by me has *received the sanction of the naval medical profession*, so far as can be gathered from a *plebiscitum*.

I trust that the second edition of the pamphlet, which is in the press, may make matters clear to all minds.

I am, Sir, your obedient servant,

Rochester, Feb. 6th, 1871. FREDERICK JAMES BROWN.

UNPROFESSIONAL ADVERTISING.

FROM all parts of the country we receive newspapers or cuttings from newspapers, containing the advertisements, more or less unprofessional, of local practitioners. Once for all, while thanking our correspondents, we have to state that we have no power to repress such practices, and that the only way to bring about the desired consummation is for the medical practitioners of the neighbourhood to combine and expose their peccant brothers in the manner they deem most effective.

Mr. T. H. Redwood.—The little manual by Dr. Tilbury FOX might probably be considered the most comprehensive on the subject.

THE VACCINATION ACT AT LEEDS.

AT a recent meeting of the Leeds Board of Guardians, Mr. Holmes, the vaccination inspector, presented his report for the quarter ending 31st December, showing that of 534 children returned as born in the township during the quarter ended 30th June, and who were unvaccinated on 1st October, 365 had been successfully vaccinated, 94 had died, 35 had their vaccination postponed on account of sickness, 36 had removed with their parents from the locality, 3 were insusceptible, and 1 had small-pox. For two successive quarters no magisterial proceedings had been necessary in respect of defaulters, compliance having in all cases followed the notices given. Only 12 cases of small-pox were admitted into the hospital during the whole of 1870, and that number includes the cases admitted from all parts of the borough. The enforcement of the provisions of the Vaccination Act has gradually reduced the deaths from small-pox to the following extent:—In 1867 they were 21, in 1868 they fell to 17, in 1869 to 14, and in 1870 to 5.

Mr. H. S. Homans is thanked; but the paragraph he encloses is not within the province of THE LANCET.

Dr. James Dewar, (Arbroath.)—Apply to Messrs. Churchill.

LINES ON THE REINTERMENT OF THE REMAINS OF JOHN HUNTER IN WESTMINSTER ABBEY.

I.

Within the walls beneath whose shade
The noblest of our land are laid,
I stood and watched due homage paid
To genius bright,
To one whose glory ne'er shall fade,
Nor lose its light.

II.

John Hunter, 'mongst the chief of those
Who study all the earthly woes
That 'gainst our bodies frail are foes,
And wound our breast,
Here in this Abbey finds repose
And honoured rest.

III.

The resting-place that first he found
No fame sufficient did redound,
Though many worthy were around.
Most noble dust,
"Let's place him here," that sentence sound,
All thought it just.

IV.

And here he lies, the man whose fame
Detraction ne'er can put to shame,
Whose glory well his works can claim—
His works that bear
The impress of his mighty name
And genius rare.

V.

In myst'ries of Creation's plan,
In study of his brother man,
His mind all former minds outran,
And far excelled,
And by its strength and God-like span
His views upheld.

VI.

A Scot was Hunter, bright the hour
When Heaven first gave his spirit power
To reach fair Science' highest bower,
And there remain.
May present Scots in ample shower
His fame sustain!

April 3rd, 1859. J. R. F.

Dr. Thomas W. Evans (President of the American International Sanitary Committee) sends us a long and interesting account of his progress in the laudable enterprise of providing the French prisoners in Germany with clothing; but we regret that we cannot find room, amid the pressure of more professional matter, for its publication.

A Constant Reader.—We think the rector was, in the interest of his household, justified in asking his own medical attendant to see the case; but the latter would have shown a proper regard for courtesy by communicating with our correspondent before doing so.

Dulcamara would be glad to know if ergot administered during labour ever proves fatal to the child, and if so, in what way?

WE shall endeavour to comply with *Mr. Gant's* request.

TREATMENT OF PERSONS SUFFERING FROM AFTER-DAMP.

To the Editor of THE LANCET.

SIR,—In answer to "M.R.C.S.," the treatment I have found most efficacious is quick removal of the patient into pure air, keeping him in the horizontal position, loosening of all tight apparel, exposure of the face, neck, and chest, and splashing of cold water on the same; the application of strong liquor ammonia to nostrils, and the administration of ten or twenty drops in cold water. Should there be a tendency to vomit, promote it by giving plentifully of warm water, thereby ridding the stomach of any distension, and affording more play for the lungs. The after-treatment consists in giving a warm bath (where convenient), removal to bed, hot bottles to feet, and well wrapping up in blankets; a mixture of aromatic spirits of ammonia, spirits of lavender, and camphor mixture. The administration of a brisk warm purge is often of service. Yours truly,

Manningtree, Feb. 7th, 1871. M.D.

PHYSICIANS MADE GOVERNORS.

THE ESSEX and Colchester Hospital has had for its *ex-officio* Governors the Lord-Lieutenant, the Bishop, the High Sheriff, the Members for the county and Essex boroughs, and the Lord Mayor of Colchester. In addition to these gentlemen, the Physicians and Surgeons of the hospital have been made Governors. It was objected that the new Governors might out-vote the others already in office; but, on its being shown that the latter were in the numerical majority, and that three of the medical Governors were entitled to be made so by virtue of their subscriptions, the objection was overruled. We should like to see a similar innovation effected in such institutions elsewhere.

Dr. McNaughton's (Bolton-le-Moors) request has been noted.

DEATH FROM TIGHT-LACING, WITH POST-MORTEM RESULTS, ETC.

To the Editor of THE LANCET.

SIR,—Jemima H——, aged twenty (appeared to me to be twenty-four), servant, complained, on returning from an errand, of severe headache and intense feeling of cold about 2 P.M. on Dec. 21st last. Her mistress desired her to lie down for the remaining part of the afternoon; but the headache still persisting, she was permitted to retire to bed for the night. As she did not "put in an appearance" at her usual hour the following morning, the mistress went to her room for the purpose of inquiring the cause, when she found the patient, still dressed as on the previous evening, lying on the bed, and quite incapable of being aroused. I was sent for at 7.30 A.M., and found her insensible on the bed, with all her clothes on, dressed, her face pale, pupils widely dilated, breathing stertorous, and on trying to remove her clothing, the task proved so difficult a one that I was obliged to cut them off. I then considered the symptoms due (from the meagre and faulty history) to congestion of the brain membranes, arising probably from the intense cold of the night acting on a weak heart. Some diffusible stimulant was ordered if it could be taken, and flying blisters to nape of neck and extremities. I then left. At 10 A.M., the hour of my second visit, the patient was wildly delirious, unrestrainable, and powerfully convulsed (clonic). At 2 P.M. I was informed, on again visiting her, she had died a short time previous, after a violent convulsive seizure, apparently exhausted. She was removed that night to the public mortuary to await a coroner's order for post-mortem examination. There was no history to the case, save the evidence of the mistress, given at the inquest, which went to prove that she had frequently, but unavailingly, remonstrated with the girl for her persistent folly in lacing so tightly.

Autopsy, forty-two hours after death.—Weather intensely cold; air crisp, dry; sky clear; recent snow-fall lay. Rigor mortis complete; no marks of violence; body indifferently nourished. I was at once struck with the nude configuration of the body, which was peculiar from the extraordinary amount of constriction at the loins and the "squareness" of the shoulders, which were remarkably high for a delicately formed female; the clavicles being horizontal, straight transversely; the form of upper part of body being flat and triangular, the base being formed by the "square" shoulders, the apex resting on the pelvis, which projected considerably, and the sides being perfectly free from contour, and sharply defined. There was little pectoral or mammal development; the lower extremities were œdematous, and the whole appearance gave me the unpleasant impression of being "pinched." On opening the chest, the lungs were found to fill the cavity completely; the right was adherent throughout to the chest-walls, and congested; the left congested. Pleural cavity contained some fluid, but there were no adhesions. The position of the diaphragm corresponded to that of extreme expiration. Heart very small, did not weigh four ounces, flabby, structure pale and weak; right ventricle distended with black fluid blood; left empty; valves healthy; pericardium contained about three-quarters of an ounce of fluid. Abdomen contained over a pint of serum in peritoneal cavity. Liver enormously enlarged, congested, and friable, the capsule readily tearing off; it extended completely across the abdomen, overlapping the left margin of spleen, to which it was firmly adherent, compressing the stomach, duodenum, transverse colon, and small intestines. I should think it did not weigh less than between sixty and sixty-five ounces. Gall-bladder, distended with bile, descended an inch below superior margin of liver. Stomach very small, not larger than an infant's; walls hypertrophied; rugæ considerably enlarged; it contained some dark-coloured fluid, apparently coffee. Duodenum much thickened; contained some bile and semi-digested food, as did small intestines. Spleen and kidneys intensely congested and enlarged. Brain membranes intensely congested; I do not think I have ever seen them more so, the whole surface presenting the appearance of a blackened mass, almost unrecognisable. There was an apoplectic spot on the surface of the right hemisphere posteriorly, with some effusion of lymph. The brain-substance was considerably softer than in health, and presented a "mottled" appearance on being cut into. No fluid in ventricles. Dark-coloured fluid at base of brain. Sinuses engorged, as also vena Galeni.

I do not think the foregoing facts need any comment further than that I have never seen a case in which the viscera were so generally and to as great an extent congested, especially the brain and its membranes, and clearly points to the severe nature of the systematic torture the victim of this unnatural propensity must have submitted herself to, and for a considerable period of time evidently, to gratify a silly and wicked vanity by tight-lacing.

Yours truly,

Claremont-square, Feb. 1st, 1871. W. H. SHEEHY, L.R.C.P. Ed., &c.

Dr. S. O. Habershon's "Clinical Notes on the Relief of Nocturnal Dyspnœa from Disease of the Heart" shall if possible be inserted in next week's number.

OUT-PATIENT HOSPITAL REFORM.

THE following additional amounts have been received at THE LANCET Office on behalf of the above:—

Dr. T. G. Tebay	£0	5	0
Mr. A. W. Moore	0	5	0
Mr. J. C. Atkinson	0	5	0

J., (Islington.)—Under ordinary circumstances vaccination is not included in the Club fee. Everyone has a right to claim the services of the public vaccinator. If, therefore, members require to be vaccinated by their own medical attendant, they should pay him a fee.

Medicus, (Bethnal-green-road.)—We rather think it would.

MODE OF PRESERVING LYMPH.

Quærens.—Taking all the facts into consideration, we think that the use of long tubes is the best method. The lymph should be brought into the middle of the tube, and should not fill more than from one-seventh to one-third of it. If the tubes are about to be soon used, and not subjected to great agitation, there is much to be said for not closing the ends. Provided that the lymph is got well into the middle of the tube, and that the tube is carried horizontally in a suitable case or bottle, this answers well, and obviates any risk of injury to the lymph by heating. It is the necessity for heating tubes which qualifies in any degree the value of this mode of preservation. But great care obviates this objection to what, in our opinion, is by far the best mode of preserving lymph.

Dr. T. B. Wright, (Walkeringham.)—We have no knowledge of the "party" who is "wanted." The case, however, is sufficiently grave to warrant its being submitted to a solicitor, who may be trusted to run the fugitive to earth.

"A PROVIDENT DISPENSARY."

To the Editor of THE LANCET.

SIR,—In your journal of the 4th instant is contained a brief article under the above heading, which has reference to the Northampton Dispensary. You congratulate us on the result we have obtained, which you consider as very satisfactory; but you intimate your regret that "the income is divided between three practitioners," adding, "for we think that all such institutions should be thrown open to the profession."

Every remark from the Editor of THE LANCET will necessarily have great weight with the medical profession. A large number of institutions are about to be started, on plans more or less corresponding with our own; the feeling of the persons starting these institutions will be influenced by your remark.

Now, as I believe that the point to which you allude as the defect in our institution is the cause of our great success, and as I fully believe that any institution founded on the plan suggested by you would inevitably fail, I trust you will not think me impertinent if I ask permission, through your columns, to submit to your readers the reason why I, with great deference, venture to differ from your conclusions.

The system of throwing open the dispensaries to all the practitioners of the place was that advocated by the late Mr. Smith, of Southam, who may, I think, be regarded as the originator of the scheme of provident dispensaries. He was very anxious that his plan should be tried in Northampton. I strongly objected to it, feeling that the responsibility of the medical men would be too divided, and that the remuneration would be inadequate to satisfy any. I wished to have only three; but was compelled by way of compromise to accept a rule, by which we were to have any number not exceeding six. We elected six. Three did four-fifths of the work. The other three were discontented; they could not act in unison. The patients complained, and the time of the Committee was occupied in disposing of squabbles. Fortunately for us, three resigned, and our Committee determined not to elect more. From that time our institution has steadily prospered, and the increase in free members' payments has averaged 10 per cent. per annum. We have not had on the average one complaint a year from the free members. Our medical men are dependent on each other for mutual aid; they have a common interest in the success of the institution, and there has never been any dispute between them.

It must not be thought that I argue from what is an exceptional case. I know of no place where the scheme of throwing the institution open to all has been tried with any measure of success. Some four years ago a dispensary similar to ours was formed in a large town near here, and the promoters sought my advice. I warned them most emphatically against having too large a medical staff. They were induced to appoint six. They have a very large number of free members; but I hear that they are in constant difficulty with the medical officers. One gentleman has ten times more cases under him than those that enter under another. Out of 13,000 free members, 11,000 are attended by three of the medical officers. One of the Committee wrote me some time since that the medical men did not act in unison; that which was proposed by the three who did the bulk of the work, was not approved by the others, and *vice versâ*. This, I replied, was exactly what I expected and foretold. The only remedy was the reduction of the medical staff.

Our Committee recently held a special meeting to consider whether it would be prudent to increase our staff. There was no opposition on the part of the medical men, although they did not consider any change necessary. I opposed it mainly on the grounds above stated; and, upon hearing my reasons, the Committee unanimously resolved to make no change.

I am, Sir, your obedient servant,

JOHN BECKE,

February, 1871. Hon. Sec. to the Royal Victoria Dispensary.

*** On the principle that "there is a great deal of human nature in man," our correspondent has probably too much reason in his observations. We can only express regret that it should be so, and repeat our wish that the benefits of the institution could be as free to the profession as to the "free members." We dislike every appearance of monopoly, and disapprove of any medical man being excluded from participation in any kind of practice that is carried on where he resides. How would it work to admit all practitioners to the staff of a provident dispensary, and to require the resignation of those who, after two years, had not a given number of members upon their lists?—ED. L.

A Club Doctor.—1. The conduct of the gentleman, as stated by our correspondent, appears to us to be unfair.—2. If he happened to be present at the time of the accident, he could not, as a matter of humanity, avoid doing something, although in courtesy and fairness he ought afterwards to have intimated what he had done to the surgeon of the Club.

Dr. C. Black, (Glasgow.) — We regret that we cannot afford space for a paper upon the subject named by our correspondent.

"*American Smartness.*"—We are unable to insert the paragraph bearing this heading forwarded by a correspondent.

Dr. Eadon (Sheffield) is thanked for his communication.

CHLORAL HYDRATE.

Messrs. H. and C. Schoetensack, Philpot-lane, Fenchurch-street, have forwarded to us the results of an analysis of their preparation of chloral hydrate by Mr. K. Müller, of the University of Göttingen, which was instituted in consequence of an article that appeared in the *Pharmaceutical Journal* of 7th January last. We are unable to insert the description of the process adopted by Mr. K. Müller; but it is only just to Messrs. Schoetensack to state that Prof. Wöhler, of the same University, declares it to be the most effective, exact, and easy method for determining the quantity of chloroform produced from chloral hydrate; and that the samples of this agent from Mr. E. Sasse, of Luisenhall, near Göttingen (manufacturing chemist to Messrs. Schoetensack), are properly constituted and thoroughly pure.

Vaccine.—The tubes are obtainable from any surgical instrument maker. The secret of getting tubes well charged with lymph is to let a good drop of lymph accumulate before applying the end of the tube to it. With good vesicles containing plenty of lymph there is no difficulty. The tube should not be filled more than from a seventh to a third. The tube should then be shaken, so as to bring the lymph into the middle of the tube. Only the very end of the tube should then be put into the flame of a spirit-lamp, so as to close it. Heat affects the lymph injuriously.

TREATMENT OF HYDATID CYSTS BY SIMPLE TAPPING.

To the Editor of THE LANCET.

SIR,—As there have been several articles in your columns lately, advocating the treatment of hydatid cysts by electrolysis, I thought that you might deem the following case worthy of insertion, as illustrative of the value of simple tapping with a fine instrument as a means of cure in these cases.

S. T——, aged seven, was admitted into this hospital on Oct. 24th, 1870, under the care of Mr. Sympson. I obtained the following history from her mother:—Two years ago she began to suffer from retention of urine, and it was then discovered that she had a small tumour in her abdomen. Since that time the tumour has gradually increased in size, and the retention of urine has been almost daily relieved by the use of a catheter. The first time that I drew her urine off I found that, after emptying the bladder, there was still a large tumour in the abdomen. On examination, this tumour was found to be movable, but generally lying with its upper extremity to the left of and about two inches higher than the umbilicus, and the lower extremity in the right inguinal region. It was clearly defined, dull on percussion, and was about the shape of the uterus at the seventh month of pregnancy. The child's appearance was healthy, except that she was very thin; but this was easily accounted for by the pain which she had suffered from the retention of urine. The bowels were regular, appetite good, urine normal. The day after her admission she was put under chloroform, and examined by the rectum, when distinct fluctuation could be detected in the tumour. The case now presented very much the characters of an ordinary ovarian cyst; but, as she had not arrived at the age of puberty, it was thought very improbable that such could be the real nature of the case.

On Nov. 3rd the patient was put under chloroform, and a perforated needle, about half the diameter of a No. 1 catheter, was passed into the tumour a little below the umbilicus, and fourteen ounces of clear, colourless fluid drawn off. This fluid possessed all the characters of that usually found in hydatid cysts—viz., neutral reaction, low specific gravity, large quantity of chlorides, and, finally, echinococci were detected in it by the aid of the microscope. A graduated pad was applied firmly over the puncture, and secured by strapping and a bandage. The tumour partially filled again; but the fluid was quickly reabsorbed, and up to the time of my writing she has had no recurrence of retention of urine, nor can any tumour be detected through the abdominal walls, though one can still be felt per rectum.

There is one point in the treatment to which I wish to call attention—viz., the use of a very fine instrument in tapping the tumour. In cases in which the fluid is sufficiently thin to allow the use of such an instrument, it seems to me that the operation is almost without danger, as the fear of effusion of the fluid into the peritoneum (in abdominal tumours) and of suppuration of the wound or cyst is reduced to a minimum.

I remain, Sir, yours, &c.,
GEOFFREY HEFF,
Lincoln County Hospital, Jan. 18th, 1871. House-Surgeon.

Mr. Charles Walton, (Newport, Mon.,) having such a very rosy complexion that his fellow-workers, male and female, accuse him of painting, wants a "receipt for it"—or rather, we presume, for its prevention. As we never prescribe "receipts," we recommend him to consult the local practitioner. Meanwhile there are many who would be glad of "half his complaint."

TESTIMONIALS.

To the Editor of THE LANCET.

SIR,—I think the sympathies of the whole profession are with you in your endeavour to abolish the custom of circulating testimonials among the lay governors of hospitals. I trust, however, you will allow me further to say that my testimonials (one of which is quoted by you) were not circulated among the governors of Charing-cross Hospital generally, but were only sent to the members of the medical staff and to some of the members of the Council. I need hardly add that I did not in the least anticipate meeting with any of them again in the pages of THE LANCET.

Your obedient servant,
February 6th, 1871. CANDIDATE Y.

*** We congratulate the writer upon the restricted character of the publicity given to his testimonials; for we were certainly led to suppose that the printed document had been sent to every governor of the hospital.—ED. L.

Medicus, (Belfast,) if a duly qualified and registered practitioner, is entitled to recover lawfully earned fees. The qualifications our correspondent specifies will not of themselves (in England at least) suffice for an appointment under the Poor Law.

CHEMISTS AS ALIENISTS.

Our friends the druggists are getting on. We well know their courage in prescribing for anything, from scabies to scarlatina. The *Canterbury Journal* gives the account of a case brought before the Police Court, in which a man was charged with wilfully damaging plants. The case was remanded, in order that the sanity of the man might be inquired into. Accordingly, on the second occasion, a certificate was duly produced from Mr. Reeve, chemist, stating that he could find no traces of insanity in the prisoner. Strange to say, the presiding magistrate, though a medical man, Mr. Cooper, accepted the certificate. Henceforth, then, we may expect the druggist to compete in court with the mad-doctors; and it requires little stretch of the imagination to fancy some future Mr. Reeve sitting in judgment on the sanity of some future Dr. Mandsley, should differences of opinion arise in court, and some future Mr. Cooper be on the bench.

P. G. H.—The reason why lymph from a revaccinated person should not be used is, that there is no sufficient guarantee that it has been properly matured. Without denying the possibility of its being protective in a certain number of cases, it cannot be doubted that it generally is not so, and on that account should not be employed.

Mr. W. D. Killick, (Chepstow.)—All we know about the scholarships is that they are non-medical. Our correspondent should address his query to the *Educational Times*.

Dr. B. Kraus (Chef Redakteur der Allg. Wiener Mediz. Zeitung) is thanked for his communication, which shall appear, in English dress, in an early number.

CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—In your admirable leading article on this subject in your issue of Jan. 21st, I think you have accidentally used the name of Sir Charles Robinson instead of that of the late Sir John Richardson, C.B., Inspector-General, of Haslar Hospital. About eighteen years ago, at Sir John's request, I compiled some statistics as to the number of cases of enthetic disease under treatment at Haslar Hospital, and this report was forwarded to the Admiralty. This was, in fact, the beginning and origin of the Lock Hospital scheme at Portsmouth. I shall be much surprised if the Government Commission do not report favourably on these Acts, although, doubtless, some suggestions for their improved working will be proposed and carried out. Refuges and penitentiaries in connexion with them are most important, and I hope they will not escape the attention of the Commission. Many of the opponents of these Acts, both lay and clerical, are utterly ignorant of their working and objects, and a reaction in their favour is, I think, not far distant. It is time they were rescued from the region of declamation and stump-oratory, and transferred to the domain of science and common sense.

Until the forthcoming Report is issued, it would perhaps be unbecoming and fruitless to say more on the subject.

I am, Sir, yours faithfully,
Chesterfield, Jan. 24th, 1871. JOHN ROSS, M.D., R.N.

To the Editor of THE LANCET.

SIR,—Your assumption that the executives employed to carry the Contagious Diseases Acts are incapable of error is not warranted by the conduct of the police in other matters which are occasionally left to their discretion; and as I have very recently, although by mere accident, had a conversation with an eye-witness of the outrage detailed in the *Daily Telegraph*, you must permit me to contradict the assertion contained in your last issue, to the effect that "this alleged occurrence never took place at all."

I am, Sir, your obedient servant,
Nottingham, Feb. 1st, 1871. C. BELL TAYLOR, M.D.

*** A person, in relating some rather extraordinary story, prefaced it by saying, "I would not have believed it if I had not seen it *with my own eyes*." To which his auditor replied, "You will excuse me, then, as I did not see it with my eyes, for not believing it." That is our case. Our correspondent may believe his eye-witness; but why should we do so, when every attempt to discover the truth of the alleged outrage has, we repeat, failed? We have not seen the account in the *Daily Telegraph*, but presume it to refer to the same story as that to which we have adverted.—ED. L.

THE Editor of the *Lincolnshire Chronicle* wishes us to explain that in our annotation last week on the "Hospital Sunday" movement, the reference to his journal as "hinting" that the Nonconformists had held back for a specific reason is calculated to convey a wrong impression. To have been exact we should have said: "The *Chronicle* says it has been alleged that the Nonconformists have held back," &c. Our editorial *confrère* is quite entitled to the benefit of this explanation, however unimportant we may think the difference in the two forms of expression.

The Village Apothecary must append his name and address to his communication if he wishes it to be published. Our columns cannot be made the arena for tournaments in which the combatants fight with "visor down."

Mr. Jones (Broseley, Salop) writes to ask whether a veterinary surgeon can be restrained from medical practice. As he has probably ascertained by this time, such a person may practise, but cannot recover fees.

Dr. W. H. Steele's (Fort Grange, Gosport) case of "Delirium Tremens successfully treated with Hydrate of Chloral" shall appear shortly.

PREGNANT FEMALES AND REVACCINATION.

To the Editor of THE LANCET.

SIR,—Can you kindly through your columns supply any information as to the propriety of revaccination in the case of pregnant females? If it can be safely done, it seems especially important for them.—Yours obediently,
February 3rd, 1871. L.R.C.P.

*** Considering that small-pox is so serious a disease in pregnancy, it seems a wise course to revaccinate pregnant women.—ED. L.

CARBOLISED TOW.

CHARPIE, which was, and probably still is, a favourite application to wounds among continental surgeons, is never seen in our own hospitals. We have on more than one occasion alluded to the frequent use of picked oakum in military hospitals. Dr. Crace Calvert sent large quantities of carbolised tow to the seat of war for the ambulance and war hospitals, and a very favourable opinion has been expressed concerning it. Carbolised tow makes an excellent external dressing, absorbing and deodorising the discharges that escape from the ward. We have received a sample of this tow, and we can endorse the satisfactory opinion of it expressed by Dr. Burney Yeo, after trial at King's College Hospital.

Dr. Ratton.—Mr. Faulkner, 40, Endell-street, Long-acre.

WE are reluctantly compelled to postpone the publication of several letters until our next number.

REVACCINATION.

To the Editor of THE LANCET.

SIR,—A correspondent, "Q. E. D.," asks in *The Times*, if people over fifty years of age are revaccinated, is erysipelas likely to follow? Having revaccinated a very large number of people in Calcutta, during the epidemic that prevailed there in 1865, of fifty years of age and upwards, I only remember one case in which erysipelas occurred. This was a man of mixed parentage (Eurasian), who lived freely, and the cause of the erysipelatous inflammation was clearly traceable to over-indulgence—not to vaccination. My own impression is, that with moderate care on the part of persons of fifty and upwards no fear need be entertained of erysipelas appearing. One case which came under my notice during the epidemic I have referred to illustrates the importance and advantages of revaccination. A medical officer was revaccinated by me successfully, and attended during the epidemic a large number of cases of small-pox, and enjoyed perfect health and immunity from the disease. He informed me that in early childhood he had small-pox, notwithstanding he had been successfully vaccinated in infancy. At the age of nineteen, when attending a charitable dispensary, he again caught small-pox; it assumed the modified form, and he got perfectly well. The probabilities are, that had he been revaccinated at puberty he would not have had a second attack, and that revaccination completely protected him while attending the epidemic from a third attack.

In India vaccination is only performed during the cold season. All attempts that have been made during the hot and rainy seasons have completely failed. I mention this circumstance, as it appears to me that if the hot season of India so nullifies the effects of the vaccine virus, possibly a series of carefully noted cases during the summer months in England might modify the view I believe at present extant—viz., that vaccination is equally successful and protective, no matter what season of the year it is performed.

Yours obediently,
JAMES C. DICKINSON,
February 9th, 1871. Late Bengal Medical Service.

Dr. Joyce, (Rolvendon, Ashford.)—By the 39th section of the Public Health Act, 1866, it is enacted that "if any person knowingly lets any house, room, or part of a house in which any person suffering from any dangerous infectious disorder has been to any other person without having such house, room, or part of a house disinfected to the satisfaction of a qualified medical practitioner as certified by a certificate given by him, such person shall be liable to a penalty not exceeding twenty pounds." It appears to us that this section exactly meets the case of our correspondent. A copy of the Act may be obtained at Knight's, Fleet-street.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir W. Fergusson; Dr. Hughes Bennett, Edinburgh; Dr. Ogle; Dr. Phillipson, Gateshead; Mr. Beck; Dr. Philpots, Poole; Dr. Roberts; Mr. Porter; Mr. Mackenzie; Dr. Morehead, Edinburgh; Dr. Borham, Halstead; Mr. E. W. Thurston, Ashford; Mr. Molineux; Mr. Robson; Mr. H. F. Smith; Mr. Blakesley; Mr. Hime, Market Drayton; Mr. G. Chunder Roy, Glasgow; Mr. Young; Dr. Protheroe Smith; Dr. Rose, Chesterfield; Mr. Hughlings, Brighton; Mr. Taylor; Dr. Swinson, Turvey; Mr. Dix; Mr. Piper; Dr. More, Rothwell; Dr. Redwood, Rhymney; Mr. Bancroft; Messrs. Fraser and Co.; Dr. Nunneley; Dr. Smith, Axbridge; Dr. J. Woiff, Berlin; Dr. Donkin, Sunderland; Mr. Gaskin; Dr. Newham, Doddington; Mr. W. Hampton; Mr. Phillips; Mr. Meade; Mr. W. Jones; Mr. Boyes, Ware; Mr. Walford, Uppingham; Mr. Brownridge, Hull; Mr. Pinchard, Walsall; Mr. Potter; Dr. Davies, Colne; Mr. E. Wood; Dr. Woodifield, Birmingham; Dr. Steele, Gosport; Mr. Nind, Torquay; Dr. Seaton; Mr. Shilton; Dr. Newhouse; Dr. Holmes; Dr. Rugg; Mr. Watton, Newport; Mr. W. Pfeil; Dr. Dewar, Arbroath; Mr. Roberts; Dr. Smith, Bath; Mr. Winyard; Dr. Sheppard; Mr. Southwell; Mr. Homans; Dr. Bridge; M. Salviati; Mr. Whitwell; Dr. Eadon, Sheffield; Mr. Pugin, Ramsgate; Mr. Watkins; Mr. Powell, Torquay; Mr. Thompson, Dudley; Mr. Tait, Birmingham; Mr. Brock, Oswestry; Mr. Hansford, Epsom; Mr. Reid; Dr. Evans; Mr. Main, Wednesbury; Mr. Pryce, Stockton; Dr. Charteris; Mr. Lownds; Mr. Farrow; Mr. Mills, Torbay; Dr. Maher, Egremont; Mr. Payne; Dr. McNaughtan, Bolton; Dr. Redford, Mexboro'; Dr. Tibbits; Mr. Stephens, Chepstow; Mr. Robinson; Mr. Hare, Cheltenham; Dr. Black, Glasgow; Mr. White; Dr. Ratton, Lee; Mr. Carter, Lee; Mr. Browne, Belfast; Mr. J. H. Jones, Eastbourne; Mr. Hope, Newcastle; H. M. S.; X.; A Junior Practitioner; Vaccine; The Editor of the *Lincolnshire Chronicle*; M.D.; Fiat Justitia; The Village Apothecary; Medicus; Ohr; A Country Surgeon; M.B.; H. L.; A Constant Reader; H.; A Club Doctor; &c. &c.

Colchester Mercury, Craven Weekly Pioneer, New York Medical Gazette, Journal de Médecine de Bruxelles, Rugby Advertiser, Wrexham Guardian, Birmingham Morning News, Temperance Record, Birmingham Daily Post, Surrey Comet, Western Mail, Wellington Journal, Brighton Examiner, Pall Mall Gazette, Swindon Advertiser, Redditch Indicator, Wisbech Chronicle, Echo, and *Brewers' Guardian* have been received.

Medical Diary of the Week.

Monday, Feb. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. H. Flower, "On the Comparative Anatomy of the Teeth of the Mammalia."
MEDICAL SOCIETY OF LONDON.—8 P.M. Dr. Edwards Crisp: "Two Specimens of Inflammatory Croup."—Mr. Spencer Watson: "Two exceptional Cases of Cataract."—Dr. Prosser James, "On Chloral."
SOCIAL SCIENCE ASSOCIATION (Adam-street, Adelphi).—8 P.M. Mr. J. B. Curgenven, "On the Laws of France relating to Illegitimate Children, Foundlings, and Orphans, and also relating to the Registration of Births and Deaths."

Tuesday, Feb. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following specimens will be exhibited:—Dr. Morell Mackenzie: Constriction of the Trachea, with Syphilitic Deposits in the Liver; Growth in the Larynx of a Dog. Dr. Moxon: General Primary Colloid Cancer of the Skeleton; Syphilitic Inflammation of the Lung; Change of Grey to Yellow Tubercle of Lung. Mr. De Morgan: Tumour of Lower Jaw; Tumour from the Axilla. Mr. Wagstaffe: Fibrous Tumour of the Heart. Mr. Morris: Femoral Hernia, Reduction *en masse*. Dr. Greenhow: Cancer of Œsophagus, with a Fistulary Opening into the Trachea. Mr. Tay: Contents of a Ranula. Dr. Marcus Beck: Spindle-celled Sarcoma connected with Posterior Tibial Nerve. Dr. Dickinson: Spinal Cord in Tetanus; Mesenteric Tumour. Mr. Weeden Cooke: Medullary Sarcoma of Skull associated with Scirrhus of Breast; Scirrhus of Brain associated with Scirrhus of Breast.
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M.

Wednesday, Feb. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. H. Flower, "On the Comparative Anatomy of the Teeth of the Mammalia."
HUNTERIAN SOCIETY.—7½ P.M. Council Meeting.—8 P.M. Dr. Braxton Hicks, "On Intermittent Action of the Uterus throughout Pregnancy."—Dr. Pye Smith, "On Syphilitic Phthisis."

Thursday, Feb. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Feb. 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. H. Flower, "On the Comparative Anatomy of the Teeth of the Mammalia."
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. J. R. Leifchild, "On Sections of Coal and Fossil Woods."—Mr. W. H. Furlonge, "On the Minute Anatomy of Pulex Irritans."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Gant, "On the Process of Occlusion in Arteries after Acupressure, with its relation to the Treatment of Surgical Hæmorrhage, and compared with Ligature and Torsion."

Saturday, Feb. 25.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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